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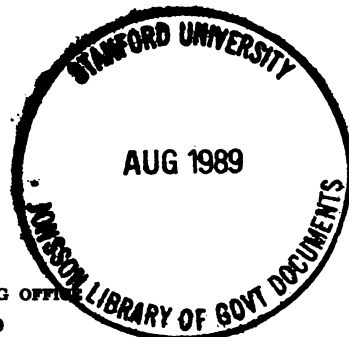
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**THE SOIL CONSERVATION SERVICE'S IMPLEMENTATION OF THE
SOIL CONSERVATION PROVISIONS OF THE FOOD SECURITY
ACT OF 1985**

HEARING
BEFORE THE
SUBCOMMITTEE ON
NUTRITION AND INVESTIGATIONS
OF THE
COMMITTEE ON AGRICULTURE,
NUTRITION, AND FORESTRY
UNITED STATES SENATE
ONE HUNDREDTH CONGRESS
SECOND SESSION
ON
THE SOIL CONSERVATION PROVISIONS OF THE FOOD SECURITY ACT OF 1985
OCTOBER 4, 1988

Printed for the use of the
Committee on Agriculture, Nutrition, and Forestry

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THE SOIL CONSERVATION SERVICE'S IMPLEMENTATION OF THE SOIL CONSERVATION PROVISIONS OF THE FOOD SECURITY ACT OF 1985

TUESDAY, OCTOBER 4, 1988

U.S. SENATE,
SUBCOMMITTEE ON NUTRITION AND INVESTIGATIONS OF THE
COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY,
Washington, DC.

The subcommittee met, pursuant to notice, at 9:40 a.m., in room SR-332, Russell Senate Office Building, Hon. Tom Harkin (chairman of the subcommittee) presiding.

Present or submitting a statement: Senators Harkin and Conrad.

STATEMENT OF HON. TOM HARKIN, A U.S. SENATOR FROM IOWA

Senator HARKIN. The Subcommittee on Nutrition and Investigations of the Senate Committee on Agriculture, Nutrition, and Forestry will come to order.

This morning we are having a hearing regarding the soil conservation compliance provisions of the farm bill of 1985. We have Mr. Wilson Scaling, the Chief of the SCS as our first witness, then we have two panels thereafter.

This hearing will focus on the implementation of the soil conservation compliance provisions of the Food Security Act of 1985. The 1985 farm bill contained landmark provisions that directly linked continued eligibility for farm program benefits to soil conservation efforts by farmers. To remain eligible for farm program benefits, a farmer producing agricultural commodities on highly erodible land must develop and implement an approved conservation plan consisting of approved conservation systems.

The law was designed to provide a strong incentive for soil conservation and to ensure that farm program benefits would not promote unacceptable levels of soil loss. Basically, public funds will be provided to supply additional income in order to help farm families survive economically. In return, farmers will agree to take necessary steps to conserve the Nation's soil. This hearing is intended to examine some of the issues that have arisen from the implementation of the soil conservation compliance provisions.

I am especially interested in learning about how these provisions are working at the local level, as farmers work with SCS, their conservation districts, and State and local personnel to develop and implement conservation plans.

Last month, I spent a workday at an ASCS office in Clarke County in southern Iowa. Part of that workday was spent at the SCS office, going over these conservation plans and how they were working with local farmers to get these plans adopted. So I do have some hands-on experience, at least with one conservation district in Iowa.

From this, I just want to make sure that farmers have the flexibility to employ conservation systems that will achieve acceptable soil erosion reductions while at the same time being practical and affordable.

I am sure we can all agree that conservation compliance is not intended to force farmers out of the farm programs or out of business. In this regard, I would encourage SCS to move quickly to evaluate the effectiveness of various types of alternative conservation practices that farmers may have in place or propose. I also encourage SCS to help develop low-input, and I will stress that again, low-input cropping systems that hold the promise of significantly reducing production costs and erosion. I will have more to say about that later. I also support as much Federal funding as possible for cost sharing these conservation practices.

I also wish to examine several issues arising from the standards used by the Department of Agriculture and the Soil Conservation Service to determine whether conservation plans and systems will allow a farmer to achieve soil conservation compliance. Under the initial set of regulations issued by USDA in June 1986, approved conservation plans and systems generally were required to reduce erosion to the soil loss tolerance level for the soil. The soil loss tolerance level, often referred to as the "T" value, is the maximum annual rate of soil erosion in tons that could occur without causing a decline in long-term productivity of the soil. Erosion rates of as much as twice the T value would be allowed where a local professional conservationist determined that economic considerations made further reductions impracticable.

In the Federal Register of June 29, 1987, USDA eliminated the T standard as a requirement for those soil and crop situations where it was determined not to be economically feasible or practical to achieve T. In those situations, farmers would be allowed to use locally developed alternative conservation systems, that is, systems that would not reduce erosion to T or tolerance levels. Although these alternative systems were available to a select group, in the Federal Register of February 11, 1988 USDA nevertheless estimated that 85 percent, or 100 million acres, of the highly erodible land subject to compliance would be brought within soil loss tolerance levels—85 percent, so a very small fraction would not be within T.

Then on May 3, 1988, Mr. Wilson Scaling, Chief of SCS, issued National Bulletin No. 180-8-31 providing that alternative conservation systems would be made available for selection for all highly erodible soils. No mention of using economic considerations as a basis for availability appeared in the bulletin. In addition, no reference to soil loss tolerance levels was to be allowed on the SCS guide sheets for alternative conservation systems. As a result every farmer must be given the option to choose a conservation system that will result in soil losses exceeding T values. Moreover, the

farmer could choose the alternative system without being advised of the levels of soil loss that could be expected.

This latest action by Mr. Scaling raises a number of troubling questions, that we will explore further in today's hearing. As I have noted earlier, I strongly favor flexibility in conservation plans to avoid economic hardship to farmers. Indeed, some flexibility will be necessary to get the rest of the plans written before the deadline. Farmers who have not yet developed their plans are probably by and large farmers who have not worked with SCS to implement conservation practices in the past. Accordingly, the last portion of the plans will likely be more difficult to complete. In other words, that last segment of farmers to get in there and get their plans approved and work with SCS are going to be the most difficult. We know that. However, I do not believe that flexibility requires that SCS abandon its original goal of reducing erosion to soil loss tolerance levels when that is economically and technically feasible. Again, I am not suggesting that farmers be held to rigid "T" values regardless of economic and technical considerations. But I am concerned that by moving so far away from the scientific principles of soil loss tolerance the May notice may unnecessarily limit the amount of soil conservation that will be achieved under the conservation compliance provisions.

Changing policy in this way tends to discourage those who have practiced conservation in good faith for years and those who were in SCS offices early to draw plans to the T level. Farmers who have done a good job of conservation could understandably see this as another instance in which farm programs have put them at a disadvantage in comparison to farmers who are less devoted to conservation.

That concludes my remarks. I look forward with great interest to the testimony of Mr. Scaling and the other witnesses on this important subject.

I would like to ask Mr. Scaling if he would come up to the table.
[The prepared statement and attachments of Senator Tom Harkin follow:]

STATEMENT OF SENATOR TOM HARKIN**COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY
SUBCOMMITTEE ON NUTRITION AND INVESTIGATIONS****HEARING ON THE SOIL CONSERVATION SERVICE'S
IMPLEMENTATION OF THE SOIL CONSERVATION PROVISIONS OF THE
FOOD SECURITY ACT OF 1985****TUESDAY, OCTOBER 4, 1988**

Today's hearing has been convened to examine some of the issues that have arisen from the implementation by the Department of Agriculture and its agency the Soil Conservation Service of the highly erodible land conservation provisions of Title XII of the Food Security Act of 1985. That act contained landmark provisions requiring a minimum level of land stewardship as a condition for receiving benefits through the several Federal agricultural programs in which farmers may choose to participate. Congress enacted the highly erodible land (or conservation compliance) provisions to provide a clear economic incentive for soil conservation and to ensure that the receipt of Federal agricultural program benefits does not promote excessive levels of soil erosion.

The Food Security Act provides generally that a farmer producing an agricultural commodity on a field on which highly erodible land is predominant is ineligible for Federal agricultural program benefits unless the commodity is produced under a conservation system approved by the conservation district as being in conformity with the technical standards in the SCS technical guide for that district. This provision was immediately effective for highly erodible land that had not been cultivated to produce any of the 1981 through 1985 crops of a commodity (or used as set-aside or otherwise not cultivated under a USDA program to reduce commodity production in those years). This is the so-called "sodbuster" provision. With respect to other land, the farmer will not lose eligibility if, as of January 1, 1990, the farmer is actively applying a conservation plan based on the local SCS technical guide and approved by the local soil conservation district. The farmer will then have until January 1, 1995, to comply with the plan without losing eligibility for program benefits.

The process of implementing the highly erodible land conservation provisions of the Food Security Act is now well underway. SCS personnel have been identifying highly erodible land subject to the conservation provisions of the act. Farmers across the Nation are working with SCS representatives, their local conservation districts, and State and local personnel to develop and implement conservation plans consisting of the conservation systems contained in the local SCS field office technical guide. I look forward to receiving information at today's hearing about how this process is working at the local level.

Whether the highly erodible land conservation provisions of the Food Security Act succeed or fail turns on the standards and criteria used by SCS in developing the conservation systems that are included in the local field office technical guide for selection by farmers as they develop their approved conservation plans. If the standards are lax, insufficient soil conservation will be achieved. Since participation in Federal agricultural programs is voluntary, farmers may choose not to participate in farm programs if the standards are too burdensome. If this occurs, conservation compliance will not apply to that farmer. Similarly, for many farmers participation in the programs is a matter of economic necessity, and thus too stringent conservation standards may impose economic hardship.

It is clear that farmers must be given the flexibility to choose conservation systems that will reduce soil erosion to acceptable levels while being practical and economically feasible in their farming operations. As evidenced by the Conference Report on the Food Security Act, it was not the intent of Congress to cause undue hardship to farmers in complying with the highly erodible land conservation provisions. The Secretary of Agriculture was specifically urged to "apply standards of reasonable judgment of local professional soil conservationist[s] and consider economic consequences in establishing requirements for measures to be included in conservation plans prepared under this provision." Congress did not intend for the highly erodible land conservation provisions to force farmers out of participation in Federal agricultural programs or to impose undue economic hardship. I am pleased that the record of this hearing will contain a statement signed by a majority of the members of the Senate Committee on Agriculture, Nutrition, and Forestry affirming these principles.

I would therefore encourage SCS to move quickly to evaluate the effectiveness of various types of conservation systems or practices that farmers may already have in place or propose to use in their conservation plans. I also

encourage SCS to help develop and evaluate low input cropping and conservation systems that hold the promise of effectively reducing both production costs and soil erosion. I also favor providing as much Federal funding as can be obtained for cost sharing on conservation practices.

Unfortunately, recent actions by SCS have cast serious doubt on whether the the soil conservation goals envisioned by Congress will be achieved under the current direction of policy in implementing the highly erodible land conservation provisions of the Food Security Act. These doubts arise from the standards and criteria that SCS is now using to judge whether conservation systems and plans reduce soil erosion sufficiently to meet the requirements of the soil conservation provisions of the act. To place the present concerns about implementation of the soil conservation provisions in context, some background on the development of USDA and SCS policy is necessary.

The Department of Agriculture issued its initial regulations implementing the highly erodible land conservation provisions in the form of an interim rule published in the Federal Register on June 27, 1986, at page 23496. Under that interim rule, qualifying conservation systems and plans "must provide for the reduction of soil loss to a level not in excess of the soil loss tolerance level established for the soil that is the subject of the plan." The soil loss tolerance level often referred to as the "T" value, is a standard routinely used by professional soil conservationists to denote the maximum annual rate of soil erosion in tons that could occur from a given soil without causing a decline in long term productivity of the soil. The "T" value varies among different soil types, but is generally around 5 tons per acre per year. The interim rule further provided that approved systems and plans may allow erosion rates of as much as twice the soil loss tolerance level if SCS determined "through the application of reasonable judgment of local professional soil conservationists and after consideration of the economic consequences ... that reduction of soil loss on such land to a lower level is impracticable."

The incorporation of soil loss tolerance levels into the standards of the interim rule of June 27, 1986, was supported by the statutory language and legislative history of the Food Security Act. Section 1201(a)(7)(A) of the Act specifically provides for use of the soil loss tolerance level and the universal soil loss and wind erosion equations for identifying highly erodible land. Similarly, reference in the Conference Report to reducing yearly soil losses "to less than 10 tons per acre" does provide some support for the interim rule's disallowance of soil losses greater than twice

the soil loss tolerance levels, as does the reference in the Conference Report to reducing soil erosion "from say 30 tons per acre to 7-8 tons per acre through the application of cost effective conservation measures."

In a memorandum to SCS State conservationists, dated January 30, 1987, SCS Chief Wilson Scaling noted that "reasonable and practical implementation of [the highly erodible land conservation provisions] requires that the SCS ... fully consider the extenuating circumstances that may cause a willing producer to be unable to comply" with the conservation systems then contained in the SCS field office technical guides, which were formulated to reduce erosion to the "T" level. The memorandum noted, however, that the field office technical guide "provides a means of accommodating exceptions." Accordingly, the memorandum directed that each SCS field office technical guide "shall contain a set of basic conservation systems for erosion control on cropland." The basic conservation systems "are based on the traditional SCS goal for erosion control, i.e., they reduce erosion rates to the soil loss tolerance level "T" subject only to the variation associated with the reliability of the erosion prediction equations." To accommodate exceptions, the memorandum stated that SCS State conservationists "may develop sets of conservation systems that are sufficient for conservation compliance under the exception policy" (emphasis added). Such systems, referred to as "alternative conservation compliance systems", were to be designated for specific limited areas. "These systems may be developed for defined geographic areas, soil associations, or groups of mapping units. They must specifically relate to the level of technical, economic, and social feasibility associated with compliance." The designation criteria for the areas and the conservation systems to be used in them were to be reviewed by the SCS national technical center and approved by the SCS Deputy Chief for Programs.

Following up on the January 30, 1987, memorandum, Galen S. Bridge, SCS Deputy Chief for Programs, issued a national bulletin on May 11, 1987, requesting information on the areas designated in response to the January memorandum and the alternative conservation compliance systems to be used in those areas. The bulletin clearly indicated that the designation of areas by the SCS State conservationists for alternative conservation systems was optional. The bulletin also provided that under certain circumstances field office technical guides could include alternative conservation systems outside of designated areas. "The areas of applicability will generally be of limited size where special consideration is needed to address unique cropping systems and soil conditions."

Both the January 30 memorandum and the May 11 bulletin allowed flexibility in conservation plans while being in conformity with the interim rule published June 27, 1986. The basic goal of reducing soil erosion to sustainable levels would still be sought, but would not serve as a rigid standard for purposes of compliance with the highly erodible land conservation provisions where reaching "T" levels would not be technically and economically feasible.

In an interim rule published in the June 29, 1987, Federal Register, USDA amended the June 27, 1986 interim rule by deleting the paragraphs that specified the "T" and "2T" standards and substituting the following language: "A conservation plan, or a conservation system ... will be based upon the SCS field office technical guide, addressing considerations of economic and technical feasibility and other related factors." USDA stated in the interim rule that the field office technical guides would be revised to contain conservation systems necessary for farmers to maintain eligibility for USDA program benefits. As stated in the interim rule, "These revisions will have the effect of eliminating a rigid 'T' standard for soil and crop situations where is it [sic] not economically or technically feasible or practical to achieve 'T'." In such situations, farmers would be allowed to use locally developed alternative conservation systems, which by definition do not reduce soil erosion to soil loss tolerance levels, contained in the local field office technical guide. The interim rule indicates that the availability of the alternative conservation systems would be limited, since USDA stated its belief that "a majority of the highly erodible cropland treated under this provision will achieve erosion reduction approaching the allowable soil loss tolerance level (T value)."

This conclusion is confirmed by USDA's final rule and accompanying discussion published in the Federal Register on February 11, 1988. The final rule is essentially the same as the interim rule published in June 1987, except for a special rule covering land not in production prior to the effective date of the Food Security Act. In discussing the final rule, USDA once again made clear that the availability of alternative conservation systems would be limited to certain situations. "The Department believes that, for certain soil and crop situations, an alternative conservation system(s) should be included in the field office technical guide that will achieve a substantial reduction in existing soil loss levels, but at the same time be cost-effective for the given situation" (emphasis added). Limited use of alternative conservation systems was also confirmed by USDA's estimate that the final rule would provide for reducing soil erosion to the soil loss tolerance (T) level on approximately 85 percent (100 million acres) of the highly erodible cropland

subject to conservation compliance under the Food Security Act.

The policy established by the June 1987 interim rule and the February 1988 final rule was a workable one. It still provided for reducing soil losses to long term sustainable levels on most soils, but permitted greater soil losses under alternative conservation systems for soil and crop situations where it was not economically or technically feasible or practical to achieve "T". This policy was designed to achieve conservation while avoiding undue hardship to farmers. As implemented in Iowa, for example, this policy allowed a farmer to remain eligible for program benefits while maintaining continuous corn production on any highly erodible soil. Across the Nation farmers were working with SCS personnel, local conservation districts, and State and local personnel to develop and implement conservation plans and systems under the USDA rules. Solid progress was being made toward reaching the goals of the highly erodible land conservation provisions of the Food Security Act.

Then on May 3, 1988, in an abrupt change of policy, SCS Chief Wilson Scaling issued National Bulletin No. 180-8-31 requiring that alternative conservation systems be included in all field office technical guides where there is highly erodible land subject to the conservation provisions of the Food Security Act. Alternative conservation systems would be developed for every highly erodible soil and would be available for selection by every farmer with that soil-crop situation. The bulletin made no mention of economic or technical considerations as a basis for the availability of alternative conservation systems. Under the bulletin every farmer may choose to use a conservation system that will result in soil losses above the "T" level on every highly erodible soil, and still remain eligible for program benefits, even if it would be economically and technically feasible and practical to reduce erosion to the soil loss tolerance level. The bulletin further directed that no reference to soil loss tolerance levels was to be allowed on the technical guide sheets for alternative conservation systems. As a result, a farmer may choose an alternative conservation system without being advised of the levels of soil loss that it would be expected to entail.

This latest action by Mr. Scaling raises a number of troubling questions that we will explore further in today's hearing. As I have noted earlier, I strongly favor flexibility in conservation plans to avoid economic hardship to farmers. Indeed, some flexibility will be necessary to get the remainder of the conservation plans written before the January 1, 1990, deadline. Farmers who have not yet

developed their plans are probably by and large farmers who have not worked with SCS to implement conservation practices in the past. Accordingly, the last portion of the plans will likely be more difficult to complete.

However, I do not believe that flexibility requires that SCS abandon its original goal of bringing erosion down to soil loss tolerance levels when that is economically and technically feasible and practical. I certainly do not suggest that farmers be held to rigid "T" values regardless of technical and economic considerations. But I am concerned that by moving so far away from the scientific principles of soil loss tolerance the May bulletin will unnecessarily limit the amount of soil conservation that will be achieved under the conservation provisions of the Food Security Act.

Mr. Scaling's bulletin of May 3 caused an abrupt and marked change in SCS policy, yet there has been no change in the governing USDA interim rule of June 29, 1987, and final rule of February 11, 1988, through rulemaking or publication in the Federal Register. The inconsistency and irregularity of changing policy in this way tends to discourage farmers who have practiced conservation in good faith for years and those who were in SCS offices early to develop conservation plans to achieve "T" levels under the earlier SCS policy. Farmers who have done a good job of conservation, and who began early to comply with the law, could understandably see this as another instance in which the farm programs and the administration of them has caused them inconvenience and hardship and put them at a disadvantage compared to farmers who have been less devoted to conservation. Finally, the way that this policy change was accomplished can only have had a detrimental effect on the morale of SCS personnel and other conservationists at the State and local level.

I therefore look forward with great interest to the testimony of Mr. Scaling and the other witnesses on these important matters at today's hearing.

(Attachments follow:)

DEPARTMENT OF AGRICULTURE**Office of the Secretary****Farmers Home Administration**

7 CFR Parts 12, 1940, 1941, 1945, 1946, and 1980

Highly Erodible Land and Wetland Conservation

AGENCY: Office of the Secretary and Farmers Home Administration, USDA.
ACTION: Interim rule.

SUMMARY: The purpose of this rule is to set forth the terms and conditions under which a person who has produced an agricultural commodity on highly erodible land or newly converted wetland shall be declared ineligible for certain benefits provided by the U.S. Department of Agriculture, i.e., commodity price support or production adjustment payments, farm storage facility loans, disaster payments, payments for storage of CCC grain, Federal crop insurance, and loans made under any provision of law administered by the Farmers Home Administration, as required by Subtitles B and C of Title XII of the Food Security Act of 1985 (Pub. L. 99-198).

DATES: Effective June 24, 1986. The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of June 24, 1986.

Comments must be received on or before August 28, 1986. In order to be assured of consideration.

ADDRESS: Comments should be mailed to Director, Cotton, Grain, and Rice Price Support Division, Agricultural Stabilization and Conservation Service (ASCS), United States Department of Agriculture (USDA), P.O. Box 2415, Washington, DC 20013.

FOR FURTHER INFORMATION CONTACT: Mr. Alex King, Program Specialist, Cotton, Grain, and Rice Price Support Division, Agricultural Stabilization and Conservation Service (ASCS), United States Department of Agriculture (USDA), P.O. Box 2415, Washington, DC 20013. Phone: (202) 447-4842. Single copies of the combined environmental assessment, regulatory impact analysis, and regulatory flexibility analysis are available through this office.

SUPPLEMENTARY INFORMATION: This rule has been reviewed under U.S. Department of Agriculture (the "Department") procedures established in accordance with provisions of Departmental Regulation 1612-1 and Executive Order 12291 and has been classified as "major." It has been

determined that an annual effect on the economy of \$100 million or more may result from implementation of the provisions of this interim rule. Copies of the regulatory impact analysis are available upon request.

The paperwork requirements imposed by this rule will not become effective until they have been approved by the Office of Management and Budget under the Paperwork Reduction Act of 1980. Such approval has been requested and is under consideration.

The Secretary of Agriculture has determined that this action may have a significant economic impact on a substantial number of small entities. The analysis prepared for this action includes a regulatory flexibility analysis.

The titles and numbers of the Federal Assistance Program to which this rule applies are: Commodity Loans and Purchases—10.081; Cotton Production Stabilization—10.082; Emergency Conservation Program—10.084; Emergency Loans—10.404; Farm Operating Loans—10.408; Farm Ownership Loans—10.407; Feed Grain Production Stabilization—10.086; Storage Facilities Equipment Loans—10.088; Wheat Production Stabilization—10.089; National Wool Act Payment—10.080; Beekeeper Indemnity Payments—10.080; Rice Production Stabilization—10.088; Federal Crop Insurance—10.480; Soil and Water Loans—10.418, as found in the catalog of Federal Domestic Assistance.

This program/activity is not subject to the provisions of Executive Order 12372, which requires intergovernmental consultation with State and local officials. See notice related to 7 CFR Part 3015, Subpart V, published at 48 FR 29118 (June 24, 1983).

In order to meet the statutory deadline for the insurance of regulations implementing the provisions of Subtitles B and C of Title XII of the Food Security Act of 1985 (the "Act") and in order to provide producers of commodities sufficient time to make their production plans for the 1987 crop year in conformity with the provisions of Subtitles B and C, it has been determined that this interim rule shall be effective upon filing with the Federal Register.

Section 1244 of the Act provides that the Secretary of Agriculture shall issue such regulations as are necessary to carry out Subtitles B and C of Title XII of the Act not later than 100 days after the enactment of the Act. The Act was signed into law on December 23, 1985. The time period provided for in the Act ends on June 21, 1986. Further, producers of winter wheat will soon be finalizing

their plans for the 1987 crop. It is necessary that these producers be aware of the actions which they may have to take or refrain from taking in order to maintain eligibility for benefits provided by the Department with respect to the 1987 crop.

Comments are requested with respect to this interim rule and such comments shall be considered in developing the final rule.

Statutory Authority

This activity is required pursuant to Subtitles B and C of Title XII of the Act. Sections 1211 and 1221 of the Act were designed to remove the incentives that certain benefits provided by the Department could give producers to cultivate highly erodible land or to convert wetlands for the purpose of producing an agricultural commodity. Sections 1211 and 1221 of the Act provide generally that any person, who in any crop year, produces an agricultural commodity on a field in which highly erodible land is predominant without an approved conservation system or on newly converted wetland shall be ineligible for commodity price support or production adjustment payments, farm storage facility loans, disaster payments, payments for storage of Commodity Credit Corporation grain, and Federal crop insurance, and loans made, insured, or guaranteed under any provision of law administered by the Farmers Home Administration if the Secretary determines that the proceeds of such loan will be used for a purpose that will contribute to excessive erosion of highly erodible lands or to conversion of wetlands for agricultural production.

This interim rule adds a new Part XII to Subtitle A of Title 7 of the Code of Federal Regulations (CFR) to implement the provisions of Subtitles B and C of Title XII of the Act. Since the ineligibility provisions affect several agencies of the Department, it was determined, in order to ensure consistent and fair application of the provisions of the Act, that one regulation be issued by the Secretary of Agriculture (the "Secretary") which generally sets forth: (1) The definitions of highly erodible land, wetland, and converted wetland, (2) the activity which would cause a producer to be ineligible under the provisions of the Act; (3) the exemptions contained in the Act; (4) the responsibilities of such agency of the Department with respect to implementation of the provisions of the Act; and (5) the appeal rights of any person who is denied eligibility under the provisions of this interim rule for benefits provided by the Department.

This interim rule shall be applicable to all affected agencies of the Department, namely the Agricultural Stabilization and Conservation Service (ASCS), the Commodity Credit Corporation (CCC), the Farmers Home Administration (FmHA), the Federal Crop Insurance Corporation (FCIC), and the Soil Conservation Service (SCS).

In addition, this interim rule amends the Farmers Home Administration (FmHA) regulations by adding Exhibit M to Subpart C of Part 1980 of Chapter XVIII of this Title and by making other conforming changes to the FmHA farmer program loan making regulations for the purpose of implementing the Act's requirements.

Discussion

A. 7 CFR Part 19—Highly Erodible Land and Wetland Conservation

(1) General

Under the provisions of this interim rule, before any person can be determined to be eligible for any of the benefits listed in sections 1211 and 1221 of the Act ("program benefits") from the Department of Agriculture, it must be determined whether such person owns, operates, or otherwise has an interest in any highly erodible land or wetland and such person must certify that such person will not produce an agricultural commodity on highly erodible land or converted wetland during the year in which the person is applying for benefits, unless such production is exempt from the provisions of sections 1211 and 1221 of the Act.

Each agency of the Department to which a person applies for benefits remains responsible for determining the person's eligibility. However, certain determinations which must be made in accordance with Subtitle B and C of Title XII of the Act may not be within that agency's expertise.

Therefore, § 12.0 of the interim rule assigns the responsibility for making certain determinations required to be made under the provisions of the interim rule to SCS, ASCS, FmHA, and FCIC.

Generally, the SCS shall make any determinations which are necessary with respect to the identification of highly erodible land or wetland, the adequacy of conservation plans, conservation systems, and other technical issues. The ASCS shall make determinations regarding cropping history, field boundaries, status of persons as producers, and other issues generally within that agency's expertise. The FmHA is responsible for determining whether loan proceeds would be used for a purpose which would contribute to excessive erosion of

highly erodible lands or to the conversion of wetlands for agricultural production.

Any determination which must be made in order to implement the provisions of this interim rule and with respect to which an agency has not been specifically assigned the responsibility to render such determination shall be made by the agency to which the person has applied for program benefits.

Any person who has been or would be denied program eligibility due to a determination rendered by an agency under the provisions of this interim rule shall have the opportunity to obtain a review of such determination. A request for reconsideration of, or appeal from, a determination must be filed with the agency of the Department that rendered the adverse determination in accordance with that agency's appeal regulations.

(2) Definition of Highly Erodible Land

Section 1201(e)(7) of the Act provides several alternative definitions of highly erodible land. The erodibility of land may be determined based upon the SCS Land Capability Classification System, the use of the Universal Soil Loss Equation and the Wind Erosion Equation, a determination of the actual erosion occurring on the land, or a combination of some of these methods. These options are discussed in detail in the environmental assessment prepared for the purposes of this interim rule.

The criteria used to identify highly erodible land affect how much land will be covered by these provisions of the Act. The 1985 National Resources Inventory (the "1985 NRI") indicates that 186.4 million acres of cropland are eroding at more than the rate of natural soil replacement, i.e., the soil loss tolerance level. Also, the 1985 NRI indicates that up to 496 million acres of pasture, range, forest, and other farmland have a potential to be converted to cropland in the future. Approximately 46 percent of this potential cropland acreage is subject to excessive erosion. Thus, if the provisions of the Act are to be effective, a majority of this acreage must be defined as being highly erodible.

It has been determined that, for the purpose of this interim rule, highly erodible soils will be identified by the application of factors from the Universal Soil Loss Equation and Wind Erosion Equation.

The use of these factors will enable the Department to determine the potential of the soil to erode excessively when cultivated without adequate conservation treatment. Erosion potential considers the physical effect

that climate, topography, and soil properties have on the erosion process, but excludes the practices and management that may or may not be applied by man. Erosion potential is determined by dividing the potential maximum average annual rate of erosion for each soil by the established soil loss tolerance rate for such soil. The potential average annual rate of erosion is determined by application of factors from the Universal Soil Loss or Wind Erosion Equation to each area of land identified on a soil map as a soil map unit.

The major advantages of using erosion potential criteria instead of other alternatives which were considered by the Department include: (1) The ability to apply this criteria to noncropland that may be cultivated in the future; (2) the ability to apply the criteria to soil map units, which are the smallest delineations of soil properties, thus facilitating the preparation of a list of high erodible soil map units; and (3) coverage of a high percentage of the soils that are currently eroding excessively. Using these factors as set forth in § 12.21 of the interim rule, 117.9 million acres of cropland and 227.3 million acres of noncropland are identified as being highly erodible. This amounts to 24.3 percent of all agricultural land and accounts for 58 percent of all cropland erosion.

The highly erodible land criteria used for this interim rule is not the same as the criteria presently used in the Conservation Reserve Program (CRP). However, the primary purpose of the CRP is to reduce excessive erosion by taking cropland out of production. The use of the land classification system in conjunction with criteria concerning the actual erosion which is occurring on the land ensures that the CRP is directed toward the most excessively eroding cropland first.

Soil map units shall be used by the Department as the basis for identifying highly erodible lands. A soil map unit represents an area of the landscape shown on a soil survey map which consists of one or more soils and is described in soil survey reports. Because each soil map unit has a unique set of physical and chemical properties, it is the basis to which the factors of the Universal Soil Loss Equation and the Wind Erosion Equation can be applied.

The Act provides that a person shall be ineligible for certain program benefits if the person produces an agricultural commodity on a field in which highly erodible land is predominant without an approved conservation system. Therefore, the Department must make a

determination of predominance with respect to such field on the farm that contains highly erodible soils. If the criterion to determine the predominance of highly erodible land is set too high, a large amount of highly erodible land would be excluded from the provisions of the Act. If the criterion are set too low, too much land that is not highly erodible will be covered by the provisions of the Act.

Section 12.22 (a) of the interim rule provides that fields containing 33.33 percent or more of the total field acreage identified as soils that are highly erodible shall be determined to be predominantly highly erodible. Generally, this highly erodible area produces most of the erosion that occurs on the field and constitutes a predominant factor limiting production on that field.

Further, § 12.22 (a) of the interim rule provides that any field shall be determined to contain a predominance of highly erodible land if the field contains 80 or more acres of highly erodible land. The Department is concerned that large fields of cropland that contain sizeable amounts of highly erodible lands would not be determined to be highly erodible through the application of the 33.33 percent criterion. For example, if 1000 acres were broken out or continued to be used for cropland under the 33.33 percent criterion, slightly more than 330 acres could be highly erodible without the field being classified as a highly erodible field. Cultivation on such large amounts of highly erodible land without adequate conservation treatment is not consistent with the intent of the Act. The Department, upon request, will assist producers in structuring field boundaries so that highly erodible areas are not included in such fields.

The criteria for determining whether a field is predominantly highly erodible are not the same as the criteria used for the CRP. Two-thirds of a field must be highly erodible in order for such field to be eligible to be placed in the CRP. Again, the two-thirds criterion under the CRP is intended to ensure that the most highly erodible fields are included in the CRP. This maximizes the beneficial impact on erosion reduction and allows the Department to place more highly erodible land into the CRP per dollar expended than lower criteria would allow.

(3) Definition of Wetland

Section 1201(e)(16) of the Act defines wetland as land that has a predominance of hydric soil and that is inundated or saturated by surface or groundwater at a frequency and

duration sufficient to support and under normal circumstances does support, a prevalence of hydrophytic vegetation typically adapted for life in saturated soil conditions. Therefore, in order for an area to be a wetland, such area must, under normal circumstances, contain both a predominance of hydric soils and a prevalence of hydrophytic vegetation.

Section 12.02(a)(18) of the interim rule adopts the statutory definition of hydric soil: Soil that in its undrained condition is saturated, flooded, or ponded long enough during a growing season to develop an anaerobic condition that supports the growth and regeneration of hydrophytic vegetation. Section 1201(b) of the Act provides that the Secretary shall develop criteria for the identification of hydric soils and shall develop a list of such hydric soils. It has been determined that the criteria to be used in the identification of hydric soils and in the development of the list of such soils shall be the criteria and soils set forth in the publication "Hydric Soils of the United States 1988." This publication was developed by the National Technical Committee for Hydric Soils, chaired by SCS, and is currently used by several agencies in defining wetland. The list of hydric soils and their criteria are the products of over 5 years effort of the Committee which is composed of an interagency team of soil scientists. The criteria used to develop the list are consistent with the criteria contained in the statutory definition.

The determination of the predominance of hydric soil in a given area shall be based on the occurrence of hydric soils in a soil map unit. A soil map unit may have a hydric soil as a major component (which would be indicated by that unit having a hydric soil as part of the name of the soil map unit) or as an inclusion or minor part of the soil map unit. A soil map unit may also be named for a miscellaneous area that meets hydric soil water table, ponding, or flooding criteria such as riverwash, playas, beaches, or water.

The predominance test is a method of identifying soil map units that have components or inclusions of hydric soils or miscellaneous areas that meet hydric soil water table, ponding, or flooding criteria. This test of predominance was chosen because other alternatives considered do not protect significant wetlands such as pebbles, or other areas meeting hydric soil criteria.

Section 1201(a)(6) of the Act defines hydrophytic vegetation as a plant growing in water or a substrate that is at least periodically deficient in oxygen during a growing season as a result of excessive water content. The Act

provides that the Secretary shall develop criteria for the identification of hydrophytic vegetation and shall develop a list of such vegetation.

Section 12.21 of the interim rule provides that the "National List of Plant Species that Occur in Wetlands" (the "National List") which was developed by the National Wetland Plant List Review Panel shall be used for the identification of hydrophytic vegetation. The National List and its classification of plant species into indicator groups based on their preference for wetland conditions is currently used in wetland determinations by a number of agencies. The National List was established through the use of definitions of hydrophytic vegetation which are consistent with the definition contained in the Act.

As stated above, in order for an area to be a wetland, such area must, under normal circumstances, contain a prevalence of hydrophytic vegetation. Section 12.21(b) of the interim rule provides for the use of a sample of the frequency of occurrence for all plants within the plant community in an area, identified by indicator groups, to arrive at a weighted average value for the purpose of determining whether or not a prevalence of hydrophytic vegetation exists in the area. In the event the vegetation on an area has been altered prior to an on-site evaluation, prevalence of hydrophytic vegetation will be determined based upon the hydrophytic vegetation which typically exists on the same hydric soil map unit in the local area.

The Department considered a number of methods to determine prevalence of hydrophytic vegetation within a plant community. The chosen evaluation process is primarily based upon research conducted by the Fish and Wildlife Service, U.S. Department of the Interior, and researchers at North Carolina State University. The weighted average method has been selected to determine prevalence because it is relatively simple to perform, is as accurate as other methods, and is objective.

The Department will review the use of the weighted average test and other methodologies to determine a prevalence of hydrophytic vegetation.

The Department intends to provide SCS handbook guidance to SCS field office personnel in order to ensure that office determinations regarding the identification of wetland are made based upon the best possible information. SCS intends to instruct its field office personnel to use, in addition to soil survey maps, other available

natural resource information such as National Wetland Inventory Maps and ASCB aerial photographs when making wetland and determinations. BCS intends to provide in its handbook that the district conservationist will review office determinations and make on-site determinations as to whether an area meets wetland criteria if: (1) Soil survey maps were not available to support the office determination; or (2) the information from the soil survey map conflicts with information from other sources such as National Wetland Inventory Maps or ASCB aerial photographs.

(4) Definition of Converted Wetland

Section 1201(a)(4) of the Act defines converted wetland as wetland that has been drained, dredged, filled, leveled, or otherwise manipulated (including any activity that results in impairing or reducing the flow, circulation, or reach of water) for the purpose or to have the effect of making the production of an agricultural commodity possible if such production would not have been possible for such action, and before such action, such land was wetland and such land was neither highly erodible land nor highly erodible cropland.

Section 12.22(e) of the interim rule provides that a wetland shall be determined to have been drained, dredged, filled, leveled, or otherwise manipulated for the purpose or to have the effect of making the production of an agricultural commodity possible if (1) one or more of the hydric soils criteria of such wetland has been removed or (2) the hydrophytic vegetation on such wetland has been removed or destroyed.

The removal of one or more of the hydric soils criteria or the removal or destruction of hydrophytic vegetation removes one or more of the criteria that characterizes an area as wetland. The removal of one or more of the hydric soils criteria or the removal or destruction of hydrophytic vegetation is an objective measure of the effect an action has on a wetland. It is a good indication as to whether the action has been taken for the purpose or to have the effect of making the production of an agricultural commodity possible on such wetland.

It should be noted that an area cannot be determined to be a converted wetland unless such area was a wetland before the drainage activity occurred. Therefore, as stated earlier, in cases where the vegetation has been removed, modified, or destroyed, BCS will determine the prevalence of hydrophytic vegetation as it existed prior to the alteration based upon the occurrence of

such vegetation typically found on the same soil map unit in the local area.

The Act also provides that wetland shall not be considered converted wetland if production of an agricultural commodity on such land during a crop year is possible as a result of a natural condition, such as a drought, and is not assisted by an action of the producer that destroys natural wetland characteristics. Section 12.22(b) of the interim rule incorporates these provisions.

During the comment period for this interim rule, the Department will be conducting pilot testing regarding the effectiveness and practicality of the criteria and methodology for making determinations under the wetland conservation provisions of this interim rule. This testing process will be carried out in consultation with the Environmental Protection Agency, the U.S. Fish and Wildlife Service, and the U.S. Army Corps of Engineers.

(5) Other Definitions

Section 1201(a)(1) of the Act defines an agricultural commodity as any crop planted and produced by annual tilling of the soil or on an annual basis by one-trip planters or sugarcane planted or produced in a State. Section 12.2(a)(1) of the interim rule adopts this definition.

Section 12.2(a)(10) of the interim rule defines the term "person" to mean an individual, partnership, association, corporation, cooperative, estate, trust, joint venture, joint operation, or other business enterprise or other legal entity and, whenever applicable, a State, a political subdivision of a State, or any agency thereof and such person's affiliates. Section 12.11 of the interim rule specifies which persons shall be considered to be affiliated for the purposes of this interim rule.

For purposes of the provisions of this interim rule it has been determined that an agricultural commodity shall be considered to have been "produced" on highly erodible land or converted wetland if the agricultural commodity has been planted. The Department recognized that considerable damage to such lands occurs at the time of planting with the breaking of the land.

Section 12.2(a)(20) of the rule defines a "producer" as a person who, as owner, landlord, tenant or sharecropper, is entitled to share in the crops available for marketing from the farm or in the proceeds thereof. This definition is consistent with the definition for a "producer" as set forth in 7 CFR 718.2(i).

Section 1201(a)(8) of the Act provides that a field shall have the same definition as it is defined in 7 CFR 718.2(b)(8). 7 CFR 718.2(b)(8) defines a

field as a part of a farm which is separated from the balance of the farm by permanent boundaries such as fences, permanent waterways, woodlands, croplines in cases where farming practices make it probable that such cropline is not subject to change, or other similar features. Accordingly, § 12.2(a)(11) of the interim rule adopts this definition.

(6) Farmers Home Administration Loans

Sections 1211(1)(E) and 1221(1)(E) of the Act provide that a person shall not be eligible for any loans made, insured, or guaranteed under any provisions of law administered by the FmHA if the Secretary determines that the proceeds of such loans will be used for either a purpose that will contribute to excessive erosion of highly erodible land or a purpose that will contribute to conversion of a wetland for agricultural production. FmHA has amended its regulations by adding Exhibit M and has made other conforming changes to its Farmer Program loan making regulations for the purpose of implementing the requirements of the Act. The amendments make it clear that an applicant will not be eligible for a Farm Operating Loan, Farm Ownership Loan, Emergency Loan, or Soil and Water Loan if FmHA determines that the proceeds of such insured or guaranteed loan will be used for either a purpose that will contribute to excessive erosion of highly erodible land or a purpose that will contribute to conversion of a wetland for agricultural production.

(7) Federal Crop Insurance

In accordance with the provisions of this interim rule, FCIC shall deny crop insurance to persons who produce an agricultural commodity on highly erodible land or converted wetland. Regulations governing the eligibility of a producer to obtain crop insurance shall be amended to conform to the provisions of this rule. FCIC shall require producers participating in the crop insurance program to provide a certification to FCIC as required in § 12.7 of the interim rule. All direct marketing insurance companies under contract with FCIC, reinsured companies, and current insureds shall be required to comply with the provisions of this rule. Because insurance policies are in effect and liability already assumed for the 1986 crop year, FCIC will require compliance with the provisions of this rule beginning with the 1987 crop year.

(9) Exemptions

Section 1212 of the Act provides that, during the period beginning December 23, 1980, and ending on the later of January 1, 1986, or the date that is 2 years after the date land on which a crop of an agricultural commodity is produced was mapped by the BCS, no person shall become ineligible under the highly erodible land conservation provisions for program loans, payments, and benefits as the result of the production of a crop of an agricultural commodity on any land that was: (a) Cultivated to produce any of the 1981 through 1985 crops of an agricultural commodity; or (b) set-aside, diverted or otherwise not cultivated under a program administered by the Secretary for any such crops to reduce production of an agricultural commodity.

These exemptions allow affected persons to continue the production of agricultural commodities on highly erodible land through January 1, 1986 (or 2 years after BCS maps the land), without having to actively apply a conservation plan to maintain program eligibility. This provision has been incorporated in § 12.10(a) of the interim rule. This exemption is applicable only in cases where the land was cultivated to produce an agricultural commodity or was used as set-aside or diverted acreage under any production adjustment program. Land that was devoted to perennial crops not requiring annual tilling during the years 1981-1985 is not included, since such plants are not included in the definition of agricultural commodity as set forth in the Act.

Section 1212 of the Act also provides that no person shall become ineligible under the highly erodible land conservation provisions for program loans, payments, and benefits as the result of the production of a crop of an agricultural commodity during before December 23, 1980, or during any crop year beginning before such date. This exemption is incorporated in the interim rule.

Section 1212 of the Act also provides that no person shall become ineligible for program payments as the result of the production of a crop of an agricultural commodity on highly erodible land if such person is using a conservation system on such land. This provision is incorporated in the rule. A person is considered to be using an approved conservation system when the planned conservation practices are being used on the land in accordance with the conservation plan.

Additionally, section 1212 of the Act provides that if, as of January 1, 1986, or 2 years after the BCS has completed a

soil survey for the farm, whichever is later, a person is actively applying a conservation plan based upon the local BCS technical guide, such person shall have until January 1, 1986, to comply with the plan without being subject to program ineligibility. This provision applies only in cases where the highly erodible land was cultivated to produce any of the 1981 through 1985 crops of an agricultural commodity or the highly erodible land was used as set-aside, diverted or otherwise not cultivated under a program administered by the Secretary for any such crops to reduce production of an agricultural commodity. This provision is incorporated in § 12.10(b) of the interim rule.

Section 12.10(c)(4) of the interim rule exempts persons from the ineligibility provisions of the interim rule if such person produced a crop of an agricultural commodity on highly erodible land in reliance on an agency determination that such land was not highly erodible.

Section 1222(a) of the Act provides, in part, that no person shall become ineligible under the wetland conservation provisions for program benefits as the result of the production of a crop of an agricultural commodity on converted wetland if the conversion of such wetland was commenced before the date of enactment of the Act (December 23, 1980).

It has been determined that a person shall be considered to have commenced the conversion of a wetland by December 23, 1980, if, prior to December 23, 1980, such person: (1) began substantial earth moving for the purpose of draining the wetland or (2) legally and financially committed substantial funds, by entering into a contract for earth moving, or otherwise, for the purpose of draining the wetland. The Department shall determine the amount of land which is exempt under this provision based upon the amount of land which would be drained by the earth moving required in the contract or, if there is no contract, which would be drained by the earth moving which had begun prior to December 23, 1980.

Section 1222(a) of the Act provides that no person shall become ineligible under the wetland conservation provisions for program loans, payments, and benefits as a result of the production of a crop of an agricultural commodity on an artificial lake, pond, or wetland created by excavating or diking nonwetland to collect and retain water for purposes such as water for livestock, fish production, irrigation (including subsurface irrigation), settling basin, cooling, rice production, or flood control.

This provision allows a producer to produce agricultural commodities on lands resulting from the conversion of artificial wetland that was itself created from nonwetland and still maintain eligibility for program benefits.

Section 12.31(c) of the interim rule provides that a wetland shall be considered to be an artificial wetland if such wetland meets the criteria for classification as a wetland but would not meet such criteria if the area was in its natural, undrained state. The rule also provides that wetlands created in order to mitigate the loss of other wetlands as a result of irrigation or flood control projects shall not be considered to be artificial wetlands.

Under the exemptions listed in section 1222 of the Act, the Secretary may also exempt a person from the wetland conservation provisions of the Act with respect to any action associated with the production on an agricultural commodity on converted wetland if the effects of such action individually and in connection with all other similar actions authorized by the Secretary in the area on the hydrological and biological aspects of wetlands are minimal. Section 12.31(d) of the rule provides that BCS, in consultation with the Fish and Wildlife Service, U.S. Department of the Interior, shall determine through an on-site evaluation whether any such actions shall have only a minimal impact on wetlands. The determination will be based upon an environmental evaluation analyzing the effect of the action on the maintenance of wetland values. The environmental evaluation of the proposed wetland alteration activities will provide a determination as to whether or not the effects of such alteration will be minimal in relation to the wetland and its values. The Department will review different methodologies (such as the Adams method, which is a test developed by the Federal Highway Administration for the purpose of determining wetland functional values) for the purpose of analyzing the effect of an action on the maintenance of wetland values.

A review of the legislative history concerning minimal effects indicates that a minimal effect is one which does not significantly alter wetland functional values and that the minimal effect exemption is expected to be rarely used.

Since this interim rule was not issued in advance of the planting of the 1986 crops of agricultural commodities, it has been determined that, in order to ensure a fair and reasonable determination of ineligibility, producers should not be denied eligibility for program benefits with respect to the 1986 crop under the

provisions of this interim rule. Therefore, § 12.14(f) of the interim rule provides that a person shall not be determined to be ineligible under the provisions of the interim rule, for any program benefits with respect to the production of a crop of a commodity which was planted during the period December 23, 1985, through June 27, 1986.

(9) Compliance

The Department will not rely entirely on certifications (as provided in accordance with § 12.7 of the interim rule) in determining whether a person has produced an agricultural commodity on highly erodible land or on converted wetland. ASCS will inspect annually a representative number of farms to determine whether persons are adhering to the requirements of eligibility set forth in this interim rule. In the past, ASCS has inspected at least 15 percent of the farms which are identified on field certifications.

The Department will also withhold or require a refund of any program benefits otherwise due a person if the person adopts or participates in adopting any scheme or device designed to evade or which has the effect of evading the provisions of this interim rule. Program benefits will be denied persons who attempt to maintain their eligibility for program benefits by creating entities that serve as the person's alter ego and produce on either highly erodible land or converted wetland.

B. 7 CFR Part 1940—General

In order to implement the provisions of Subtitles B and C of Title XII of the Act, it has been determined to amend subpart G of Part 1940 of Chapter XVIII of Title 7 of the CFR by adding a new Exhibit M. This amendment applies to Insured Farm Operating Loans, Farm Ownership Loans, Emergency Loans, and Soil and Water Loans, and also Farmer Program Guaranteed Loans and explains the circumstances under which applicants and borrowers proposing to produce an agricultural commodity on a converted wetland or a field on which highly erodible land is predominant will be determined to be ineligible for FmHA financial assistance.

Exhibit M incorporates the provisions of 7 CFR Part 12 with respect to the implementation of the Act. FmHA will coordinate its activities in implementing the Act with the Soil Conservation Service (SCS), the Agricultural Stabilization and Conservation Service (ASCS) and the Federal Crop Insurance Corporation (FCIC).

Paragraph 5 of Exhibit M provides that each applicant, at the time of loan

application, must consult with SCS to determine if the applicant's farm property contains any wetland or highly erodible land, and if so, whether any of the exemptions contained in 7 CFR 12.5 apply. This consultation with SCS need not be repeated by the applicant for a subsequent loan as long as there is no change in either the applicant's farm property or the status of any previous exemptions.

Paragraph 5 of Exhibit M also provides that if any applicant's property contains wetlands or highly erodible land, the applicant must certify that the proceeds of the FmHA loan will not be used for either: (1) A purpose that will contribute to conversion of a wetland to produce an agricultural commodity, or (2) a purpose that will contribute to the production of an agricultural commodity on a nonexempt field on which highly erodible land is predominant unless such production is done in accordance with an approved conservation system. Compliance with these procedures will be documented by FmHA as a part of its environmental assessment process. If an applicant does plan to use the proceeds of an FmHA loan to convert a wetland or agricultural production or to produce an agricultural commodity on a nonexempt field on which highly erodible land is predominant, such applicant will not be eligible for the loan.

During the term of a loan received by a borrower whose property contains a wetland or a field on which highly erodible land is predominant, FmHA will review the borrower's compliance with the provisions of Exhibit M as an element of loan servicing which includes scheduled farm visits, development of a farm plan of operation, and other contacts with borrowers. Lenders of FmHA guaranteed loans are also responsible for monitoring compliance as part of their servicing activities. If it is determined that a borrower has misused the proceeds of an FmHA insured loan, as defined in Exhibit M, that loan will be declared to be in default. In a similar case for a guaranteed loan, any failure of the lender to adequately implement the compliance requirements of Exhibit M will be considered negligent or lasing and any loss attributed to such negligent servicing will not be paid by FmHA.

The basic need to amend subpart G of Part 1940 stems from the language in sections 1211(1)(E) and 1251(1)(E) of the Act. They provide that a person shall not be eligible for any loans made, insured, or guaranteed under any provisions of law administered by FmHA if the Secretary determines that the proceeds of such loans will be used for

either a purpose that will contribute to excessive erosion of highly erodible land or a purpose that will contribute to the conversion of a wetland for agricultural production. It has been determined and is so stated in paragraph 5 of Exhibit M that excessive erosion of highly erodible land results whenever a nonexempt field on which highly erodible land is predominant is used to produce an agricultural commodity without conformance to an approved conservation system. This position has been taken because it is consistent with the standard set by the Act for the production of an agricultural commodity on nonexempt highly erodible land. That is, each production must be done in accordance with an approved conservation system.

A second issue related to the implementation of section 1211(1)(E) is the definition of the phrase "a purpose that contributes to excessive erosion or conversion of a wetland." It has been determined and is so stated in paragraph 5 of Exhibit M that the proceeds of a loan will be considered to be used for a purpose that contributes to excessive erosion or conversion of a wetland if proceeds are used to purchase the affected land, plow the conversion, drain or plow the land, and plant an agricultural commodity on a nonexempt converted wetland over any of the ten years following the conversion. The use of a ten-year period following the crop year in which the wetland was converted has been selected because this period provides a clear economic break or economic disincentive to the approach of using non-FmHA funds to convert a wetland and then applying for FmHA funds to cultivate the converted wetland. From an economic perspective, it would not be economically feasible for a person to take such an approach in hopes of obtaining FmHA funding if such funding is not possible until ten years into the future. Consequently, after ten years there is no longer a nexus between the conversion and the use of FmHA proceeds for FmHA to determine that the proceeds of the loan are being used for a purpose that contributes to conversion of a wetland for agricultural production. An alternative to the above definition was considered which would cover only those proceeds used for costs directly associated with the conversion of the wetland or the plowing of the highly erodible land. This second alternative was not adopted because it provides too limited an approach in meeting the legislation's purpose of reducing the conversion of wetland and the cultivation of highly erodible land

when accommodated by USDA financial assistance programs. Furthermore, the selected approach makes FmHA's implementation procedures more consistent with those of the other affected USDA agencies.

Conforming changes to the Farmer Program loanmaking regulations are also being made to insure that the requirements found in Exhibit M are considered before such loans are approved or guaranteed.

List of Subjects

7 CFR Part 12

Highly erodible land, Wetland, Conservation, Price support programs, Federal crop insurance, Farmers Home Administration loans, Incorporation, Loan programs—Agriculture, Environmental protection.

7 CFR Part 180

Endangered and threatened wildlife, Environmental protection, Floodplains, National wild and scenic river system, Natural resources, Recreation, Water supply.

7 CFR Part 194

Crops, Livestock, Loan programs—Agriculture, Rural areas, Youth.

7 CFR Part 193

Credit, Loan programs—Agriculture, Recreation, Water resources.

7 CFR Part 194

Agriculture, Disaster assistance, Loan programs—Agriculture.

7 CFR Part 180

Agriculture, Loan programs—Agriculture.

Accordingly, the regulations of Subtitle A and Chapter XVII of Title 7 of the Code of Federal Regulations are amended as follows:

Subtitle A—Office of the Secretary of Agriculture

1. Subtitle A—Office of the Secretary of Agriculture is amended by adding a new Part 12, Highly Erodible Land and Wetland Conservation, as follows:

PART 12—HIGHLY ERODIBLE LAND AND WETLAND CONSERVATION

Subpart A—General Provisions

Sec.

12.1 General.

12.2 Definitions.

12.3 Applicability.

12.4 Determination of ineligibility.

12.5 Exemptions.

12.6 Administration.

12.7 Certification.

Sec.

12.8 Action based upon advice or action of Department.

12.9 Schemes or devices.

12.10 Appeals.

12.11 Affiliated persons.

Subpart B—Identification of Highly Erodible Land

12.20 Responsibilities of Soil Conservation Service.

12.21 Criteria for identifying highly erodible lands.

12.22 Field application of highly erodible map units.

12.23 Reconsideration and appeals.

Subpart C—Wetland Conservation

12.24 Responsibilities of Soil Conservation Service.

12.25 Criteria for identification of wetland.

12.26 Criteria for identification of converted wetland.

12.27 Wetland determination procedure.

Authority: Secs. 1286–1288, 1291–1294 of Pub. L. 95–502 (50 Stat. 1266 et seq.); 50 U.S.C. 2025–2028, 1901–1904.

Subpart A—General Provisions

§ 98.1 General.

(a) This part sets forth the terms and conditions under which a person, who, after December 23, 1985, produces an agricultural commodity on highly erodible land or converted wetland, shall be determined to be ineligible for certain benefits provided by the U.S. Department of Agriculture.

(b) The purposes of the provisions of this part are to remove certain incentives for persons to produce agricultural commodities on highly erodible land or converted wetland and to thereby—

- (1) Reduce soil loss due to wind and water erosion;
- (2) Protect the Nation's long term capability to produce food and fiber;
- (3) Reduce sedimentation and improve water quality;
- (4) Assist in preserving the Nation's wetlands; and
- (5) Curb production of surplus commodities.

§ 98.2 Definitions.

(a) The following definitions shall be applicable for the purposes of this part:

(1) "Agricultural commodity" means any crop planted and produced by annual tilling of the soil or an annual bush by one-trip planters or evergreens planted or produced in a State;

(2) "ASCS" means the Agricultural Stabilization and Conservation Service, an agency of the U.S. Department of Agriculture which is generally responsible for administering commodity production adjustment and certain conservation programs of the Department;

(3) "Conservation District (CD)" means a subdivision of a State organized pursuant to the applicable State Soil Conservation District Law;

(4) "Conservation plan" means the plan describing the conservation system which must be or has been established on highly erodible cropland in order to control erosion on such land;

(5) "Conservation system" means the part of a cropland resource management system for a field or group of fields that provides for cost efficient and practical erosion reduction based upon the standards set forth in the SCS field office technical guide. A conservation system may include single practices or a combination of practices;

(6) "Converted wetland" means wetland that has been drained, dredged, filled, leveled, or otherwise manipulated (including any activity that results in impairing or reducing the flow, circulation, or reach of water) for the purpose or to have the effect of making the production of an agricultural commodity possible if: (i) Such production would not have been possible but for such action; and (ii) before such action (A) such land was wetland; and (B) such land was neither highly erodible land nor highly erodible cropland;

(7) "COC" means the Commodity Credit Corporation, a wholly-owned government corporation within the U.S. Department of Agriculture organized under the provisions of 18 U.S.C. 714 et seq.;

(8) "Department" means the U.S. Department of Agriculture;

(9) "FmHA" means the Farmers Home Administration, an agency of the U.S. Department of Agriculture which is generally responsible for providing farm loans and loan guarantees under the Commodity Credit Program and Rural Development Act (7 U.S.C. 1921 et seq.) and other laws;

(10) "FCIC" means the Federal Crop Insurance Corporation, a wholly-owned government corporation within the U.S. Department of Agriculture organized under the provisions of 7 U.S.C. 1921 et seq.;

(11) "Field" means a part of a farm which is separated from the balance of the farm by permanent boundaries such as fences, roads, permanent waterways, woodlands or cropland in cases where farming practices make it probable that such cropland is not subject to change, or other similar features;

(12) "Highly erodible land" means land that, if used to produce an agricultural commodity, would have an excessive average annual rate of soil erosion as determined through

application of factors from the universal soil loss equation and the wind erosion equation, including factors for climate, soil erodibility, and field slope;

(13) "Hydric soils" means soil that, in its undrained condition, is saturated, flooded, or ponded long enough during a growing season to develop an anaerobic condition that supports the growth and reproduction of hydrophytic vegetation;

(14) "Hydrophytic vegetation" means a plant growing in—

(i) Water; or
(ii) A substrate that is at least periodically deficient in oxygen during a growing season as a result of excessive water content;

(15) "Landlord" means a person who rents or leases farmland to another person;

(16) "Local ABCS office" means the county office of the Agriculture Stabilization and Conservation Service serving the county or a combination of counties in the area in which the producer's land is located for administration purposes;

(17) "Operator" means the person who is in general control of the farming operations on the farm during the crop year;

(18) "Owner" means a person who has legal ownership of farmland including a person who is purchasing farmland under contract;

(19) "Person" means an individual, partnership, association, corporation, cooperative, estate, trust, joint venture, joint operation, or other business enterprise or other legal entity and, whenever applicable, a State, a political subdivision of a State, or any agency thereof and such person's affiliates as provided in § 12.11 of this part;

(20) "Producer" means a person who, as owner, landlord, tenant or sharecropper, is entitled to share in the crop available for marketing from the farm or in the proceeds thereof;

(21) "Secretary" means the Secretary of the U.S. Department of Agriculture;

(22) "Sharecropper" means a producer who performs work in connection with the production of a crop under the supervision of the operator and who receives a share of such crop for such labor;

(23) "SCS" means the Soil Conservation Service, a technical conservation agency within the U.S. Department of Agriculture which is generally responsible for providing technical assistance in matters of soil and water conservation and for administering certain conservation programs of the Department;

(24) "Soil map unit" means an area of the landscape shown on a soil map which consists of one or more soils;

(25) "Tenant" means a person usually called a "cash tenant", "fixed-rent tenant", or "standing rent tenant" who rents land from another for a fixed amount of cash or a fixed amount of a commodity to be paid as rent; or a person (other than a sharecropper) usually called a "share tenant" who rents land from another person and pays as rent a share of the crops or proceeds therefrom. A tenant shall not be considered the farm operator if the tenant does not have control of the farm operation; and

(26) "Wetland," except when such term is part of the term "converted wetland," means land that has a predominance of hydric soils and that is inundated or saturated by surface or ground water at a frequency and duration sufficient to support and that under normal circumstances does support a prevalence of hydrophytic vegetation typically adapted for life in saturated soil conditions.

(b) In the regulations in this part and in all instructions, forms, and documents in connection therewith, all other words and phrases specifically relating to ABCS operations shall, unless the context of subject matter otherwise requires, have the meanings assigned to them in the regulations governing reconstitutions of farms, allotments and leases (7 CFR Part 719).

§ 12.2 Applicability.

The provisions of this part shall apply to private land, Indian tribal land, and State or local government owned land in the 50 States, the Commonwealth of Puerto Rico, Guam, the Virgin Islands of the United States, American Samoa, the Commonwealth of the Northern Mariana Islands, and the Trust Territory of the Pacific Islands.

§ 12.4 Determination of eligibility.

(a) Except as provided in § 12.5, any person who, after December 31, 1985, produces an agricultural commodity on a field in which highly erodible land is predominant or an converted wetland shall be ineligible:

(1) As to any commodity produced on any land during that crop year by such person;

(2) For any type of price support or payment made available under the Agricultural Act of 1956, the CCC Charter Act, or any other Act;

(3) For a farm storage facility loan made under section 4(h) of the CCC Charter Act;

(4) For any disaster payments made under the Agricultural Act of 1956;

(v) For crop insurance under the Federal Crop Insurance Act;

(v) For a loan made, insured, or guaranteed under the Consolidated Farm and Rural Development Act or any other provision of law administered by the FmHA, if FmHA determines that the proceeds of such loan will be used for a purpose that will contribute to excessive erosion of highly erodible land or to conversion of wetland for agricultural production; or

(3) For a payment made under section 4 or 5 of the CCC Charter Act during such crop year for the storage of an agricultural commodity owned by CCC.

(b) A person shall be determined to have produced an agricultural commodity on a field in which highly erodible land is predominant or an converted wetland if:

(1) SCS has determined either that—

(i) Highly erodible land is predominant in such field or

(ii) The land is converted wetland;

(2) ABCS has determined that the person, as owner, landlord, tenant or sharecropper, is entitled to share in the crops available for marketing from the land, or in the proceeds thereof; and

(3) ABCS has determined that the land is planted to an agricultural commodity or was planted to an agricultural commodity during the year for which the person is requesting benefits.

§ 12.5 Exceptions.

(a) During the period beginning on December 31, 1985, and ending on the later of January 1, 1990, or the date that is two years after the date land on which a crop of an agricultural commodity is produced was mapped by the SCS for purposes of classifying such land as highly erodible, and except as provided in paragraph (b) of this section, no person shall be determined to be ineligible for benefits in accordance with this part as the result of the production of a crop of an agricultural commodity on any highly erodible land:

(1) That was planted to an agricultural commodity in any year 1981 through 1989; or

(2) That was set aside, diverted or otherwise not cultivated under a program administered by the Secretary for any such crops to reduce production of an agricultural commodity.

(b) Conservation plan. (1) With respect to the production of an agricultural commodity on any land identified in paragraph (a) of this section, if, as of January 1, 1990, or the date that is 2 years after the date SCS has completed a soil survey for the farm, whichever is later, a person is actively applying a conservation plan based on the local SCS technical guide and approved by the CEI, in connection

with the local ABC committee and SCS acting on behalf of the Secretary, or by SCS acting on behalf of the Secretary, such person shall have until January 1, 1986, to fully comply with the plan without being determined to be ineligible for benefits in accordance with § 12.4 of this part.

(2) Except as provided in paragraph (1)(3) of this section, a conservation plan developed for the purposes of this paragraph and a conservation system developed for the purposes of paragraph (c) of this section must provide for the reduction of soil loss to a level not in excess of the soil loss tolerance level established for the soil that is the subject of the plan.

(3) A conservation plan developed for the purposes of this paragraph and a conservation system developed for the purposes of paragraph (c) of this section may provide for the reduction of soil loss to a level not in excess of two times the soil loss tolerance level established for the soil that is the subject of the plan if SCS determines, through the application of reasonable judgement of local professional soil conservationists and after consideration of the economic consequences in establishing requirements for measures to be included in conservation plans, that reduction of soil loss on such land to a lower level is impracticable.

(c) A person shall not be ineligible for program benefits in accordance with § 12.4(a), as the result of the production of a crop of an agricultural commodity which was:

- (1) Planted before December 23, 1985;
- (2) Planted during any crop year beginning before December 23, 1985;
- (3) Produced on highly erodible land in an area:

(i) Under a conservation system that has been approved by the CD after the CD determined that the conservation system is in conformity with technical standards set forth in the SCS technical guide for such district; or

(ii) Not within a CD, under a conservation system determined by SCS acting for the Secretary to be adequate for the production of such agricultural commodity on highly erodible land; or

(4) Produced on highly erodible land in reliance on a determination by SCS that such land was not highly erodible land, except that this paragraph (c)(4) shall not apply to any agricultural commodity that was planted on any land after SCS determines that such land is highly erodible land, and the person is notified of such determinations.

(d) *Exceptions for converted wetland.* (1) A person shall not be determined to be ineligible for program benefits in

accordance with § 12.4 as the result of the production of a crop of an agricultural commodity on:

(i) Converted wetland if the conversion of such wetland was commenced before December 23, 1985;

(ii) An artificial lake, pond or wetland created by excavating or diking non-wetland to collect and retain water for purposes such as water for livestock, fish production, irrigation (including subsurface irrigation), a settling basin, cooling, fire protection, or flood control;

(iii) A wet area created by a water delivery system, irrigation, irrigation system, or application of water for irrigation; or

(iv) Wetland on which production of an agricultural commodity is possible as a result of a natural condition, such as drought, and is possible without action by the producer that destroys a natural wetland characteristic; or

(v) Converted wetland if § 9.3 has determined that the actions of the person with respect to the production of an agricultural commodity on the converted wetland, individually and in connection with all other similar actions authorized by the Secretary in the area, would have only a minimal impact on the hydrological and biological aspect of the wetland.

(2) The conversion of a wetland will be considered to have been commenced before December 23, 1985, if, before December 23, 1985, earth moving for the purpose of draining the wetland was actually started, or the person applying for the benefits has legally and financially committed substantial funds by entering into a contract providing for earth moving, or otherwise, for the purpose of converting the wetland.

(a) The provisions of § 12.4(a) shall not apply to any loss as described in § 12.4(a) that was made before December 23, 1985.

(b) A person shall not be determined to be ineligible in accordance with the provisions of this part for any benefits listed in § 12.4(a) with respect to the production of a crop of a commodity which was planted during the period December 23, 1985, through June 27, 1986.

(c) *Landlords and tenants.* (1) Except as provided in paragraph (g)(2), the ineligibility of a tenant or sharecropper (as determined in accordance with § 12.4) for benefits shall not cause a landlord to be ineligible for benefits for which the landlord would otherwise be eligible with respect to commodities produced on lands other than those in which the tenant or sharecropper has an interest.

(2) Paragraph (g)(1) shall not be applicable to a landlord if the

production of an agricultural commodity on highly erodible land or converted wetland by the landlord's tenant or sharecropper is required under the terms and conditions of the agreement between the landlord and such tenant or sharecropper and such agreement was entered into after December 23, 1985.

§ 12.6 Administration.

(a) A determination of ineligibility for benefits in accordance with the provisions of this part shall be made by the agency of the Department to which the person has applied for benefits. All determinations required to be made under the provisions of this part shall be made by the agency responsible for making such determinations, as provided in this section, and shall be binding on all other agencies of the Department.

(b) *Administration by ASCS.*

(1) The provisions of this part which are applicable to ASCS will be administered under the general supervision of the Administrator, ASCS, and shall be carried out in the field in part by State ABC committees (STC) and county ABC committees (COC).

(2) The Deputy Administrator, State and County Operations, ASCS (hereinafter referred to as the "Deputy Administrator") may determine any question arising under the provisions of this part which are applicable to ASCS and may reverse or modify any determination of eligibility with respect to programs administered by ASCS made by a STC or COC in connection with the provisions of this part.

(3) ASCS shall make the following determinations which are required to be made in accordance with this part:

(i) Whether a person is a producer on a particular field in accordance with § 12.4(b);

(ii) The establishment of field boundaries in accordance with § 12.5(a)(1);

(iii) Whether land was planted to an agricultural commodity in any of the years, 1981 through 1985, in accordance with § 12.5(a)(1);

(iv) Whether land was set aside, diverted or otherwise not cultivated under a program administered by the Secretary for any crop to reduce production of an agricultural commodity in accordance with § 12.5(a)(2);

(v) Whether the agricultural commodity planted on a particular field was planted before December 23, 1985, or during any crop year which began before December 23, 1985, in accordance with § 12.5(c) (1) and (2);

(vi) Whether the production of an agricultural commodity on highly

erodible land or converted wetland by a landlord's tenant or sharecropper is required under the terms and conditions of the agreement between the landlord and such tenant or sharecropper in accordance with § 12.4(g); and

(ii) Whether highly erodible land is predominant on a particular field in accordance with § 12.4(e);

(iii) Whether a person is actively applying a conservation plan that is based on the local BCS technical guide and which is approved by—

(A) The CD, in consultation with local ASC committees and BCS acting on behalf of the Secretary; or

(B) By BCS acting on behalf of the Secretary;

(iv) Whether a person is using a conservation system that has been approved by the CD in accordance with § 12.4(e)(8) of this part or, in an area not within a CD, a conservation system determined by the BCS to be adequate for the production of a specific agricultural commodity on highly erodible land;

(v) Whether production of an agricultural commodity on a wetland is possible as a result of a temporary natural condition and is possible without action by the producer that destroys a natural wetland characteristic; and

(vi) Whether the actions of a person with respect to the production of an agricultural commodity on the converted wetland would have only a minimal impact on the hydrological and biological aspect of wetland.

(vii) Whether the conversion of a particular wetland was commenced before December 23, 1982 in accordance with § 12.4(d)(1)(i).

(4) A representative number of farms selected in accordance with instructions issued by the Deputy Administrator shall be inspected by an authorized representative of ASCS to determine if any requirement specified in this part is a prerequisite for obtaining program benefits.

(c) *Administration by BCS.*

(1) The provisions of this rule that are applicable to BCS shall be administered under the general supervision of the Chief of the BCS and carried out in the field by the state conservationist and district conservationist.

(2) BCS shall make the following determinations which are required to be made in accordance with this part:

(i) Whether land is highly erodible or is a wetland or a converted wetland in accordance with the provisions of this part;

(2) BCS will provide such other technical assistance in the implementation of the provisions of this part as is determined to be necessary.

(d) *Administration by FmHA.*

(1) The provisions of this part which are applicable to FmHA will be administered under the general supervision of the FmHA Administrator through FmHA's State, district, and county offices.

(2) FmHA shall determine whether the proceeds of any loan made, insured or guaranteed under any provision of law administered by FmHA will be used for a purpose that will contribute to excessive erosion of highly erodible land or to the conversion of wetland as required in accordance with the provisions of this part.

(3) The provisions of this part which are applicable to FCSC will be administered under the general supervision of the Manager, FCSC.

§ 12.7 *Certification.*

(a) In order for a person to be determined to be eligible for any of the benefits specified in § 12.4—

(1) It must be determined, in consultation with BCS, whether any farm in which the person applying for the benefits has an interest as owner, operator, or producer contains highly erodible land, wetland or converted wetland if the conversion of such wetland occurred after December 23, 1982;

(2) The person applying for the benefits must certify (Form AD-1099 Highly Erodible Land and Wetland Conservation Certification) that such person will not produce an agricultural commodity on highly erodible land or converted wetland during the crop year in which the person is seeking such benefits, unless such production is exempt, in accordance with § 12.3 of this part, from the provisions of § 12.4 of this part;

(3) With respect to a request for a loan made, insured or guaranteed under any provision of law administered by the FmHA, the person applying for the loan must certify that such person shall not use the proceeds of the loan for a purpose that will contribute to excessive erosion of highly erodible land or to conversion of wetlands; and

(4) The person applying for the benefits must authorize any representative of the Department access to all land which such person owns or operates, or has an interest in for the purpose of verifying any such certification.

(b) Each agency of USDA shall make all certifications received by it and the results of investigations concerning such certifications available to other agencies.

(c) A certification made in accordance with this section does not relieve any

person from compliance with the provisions of this part.

§ 12.8 *Action based upon advice or action of Department.*

The provisions of Part 780 of this Title, as amended, relating to performance based upon the action or advice of a COC or BTC shall be applicable to the provisions of this part.

§ 12.9 *Scheme or device.*

All or any part of the benefits listed in § 12.4 otherwise due a person from the Department may be withheld or required to be refunded if the person adopts or participates in adopting any scheme or device designed to evade or which has the effect of evading the provisions of this part. Such acts shall include, but are not limited to, concealing from the Department any information: having a bearing on the application of the provisions of this part or submitting false information to the Department or creating entities for the purpose of concealing the interest of a person in a farming operation or to otherwise avoid compliance with the provisions of this part.

§ 12.10 *Appeals.*

Any person who has been or would be denied program benefits in accordance with § 12.4 as the result of any determination made in accordance with the provisions of this part may obtain a review of such determination in accordance with the administrative appeal procedures of the agency which rendered such determination.

§ 12.11 *Affiliated persons.*

(a) For purposes of this part, the following persons are considered to be "affiliated" and, in addition the actions of such persons will be considered for the purposes specified in this part to be the actions of the person who has requested benefits from the Department:

(1) The spouse and minor child of such person and/or guardian of such child;

(2) Any corporation in which the person is a stockholder, shareholder, or owner of more than 50 per cent;

(3) Any partnership, joint venture, or other enterprise in which the person has an ownership interest or financial interest; and

(4) Any trust in which the person or any person listed in paragraphs (a) (1) through (3) of this section is a beneficiary or has a financial interest.

(b) If the person who has requested benefits from the Department is a corporation, partnership, or other joint venture, then, for purposes of applying paragraph (a), of this section, the person who has separated benefits from the

Department shall be considered to be such corporation, partnership, or other joint venture, and each individual owner, participant, or stockholder therein, except for persons with a 20 percent or less share in a corporation.

Subpart B—Identification of Highly Erodible Land

§ 12.20 Responsibilities of Soil Conservation Service.

In implementing the provisions of this part, SCS shall, to the extent practicable:

- (a) Develop and maintain criteria for identifying highly erodible lands;
- (b) Prepare, and make available to the public, lists of highly erodible soil map units;
- (c) Make soil surveys for purposes of identifying highly erodible land; and
- (d) Provide technical guidance to conservation districts which must approve conservation plans and systems in consultation with local county ASC committees and SCS for the purposes of this part.

§ 12.21 Criteria for identifying highly erodible lands.

(a) Soil map units will be used as the basis for identifying highly erodible land. The erodibility of a soil is determined by dividing the potential average annual rate of erosion for each soil by the predetermined soil loss tolerance (T) value for the soil. The T value represents the maximum annual rate of soil erosion that could occur without causing a decline in long-term productivity.

(1) The potential average annual rate of sheet and rill erosion is estimated by multiplying the following factors of the Universal Soil Loss Equation (USLE):

- (i) Rainfall and runoff (R);
 - (ii) The degree to which the soil resists water erosion (K); and
 - (iii) The function (LS), which includes the effects of slope length (L) and steepness (S).
- (2) The potential average annual rate of wind erosion is estimated by multiplying the following factors of the Wind Erosion Equation (WEQ): Climatic characterization of windspeed and surface soil moisture (C) and the degree to which soil resists wind erosion (I).

(3) The USLE is explained in U.S. Department of Agriculture Handbook 537, "Predicting Rainfall Erosion Losses." The WEQ is explained in Agriculture Handbook 366, "Wind Erosion Forces in the United States and Their Use in Predicting Soil Loss." Values for all the factors used in these equations are contained in the SCS field office technical guide and the references which are a part of the guide.

(b) A soil map unit subject to significant erosion by water or by wind, but not both, shall be determined to be highly erodible if either the $RKLS/T$ or the CI/T value equals or exceeds 8.

(c) Whenever a soil map unit description contains a range of slope length and steepness characteristics that produce a range of LS values which result in $RKLS/T$ quotients both above and below 8, the soil map unit will be entered on the list of highly erodible soil map units as "potentially highly erodible." The final determination of erodibility for an individual field containing these soil map unit delineations is made by an on-site investigation.

§ 12.22 Field application of highly erodible map units.

(a) Highly erodible land shall be considered to be predominant on a field if:

- (1) 33.33 percent or more of the total acreage is identified as soil map units which are highly erodible; or
- (2) 20 or more acres in such field is identified as soil map units which are highly erodible.

(b) A person may request the modification of field boundaries for the purpose of excluding highly erodible land from a field. Such a request must be submitted to, and is subject to the approval of ASCS.

(c) Small areas of noncropland, such as abandoned farmsteads, areas around filled or capped wells, rock piles, trees, or brush, which shall be included in existing fields which meet the requirements of § 12.2(a) shall be considered to meet the requirements of § 12.2(a).

§ 12.23 Reconsiderations and Appeals.

A producer may request a reconsideration of any determination rendered by SCS in accordance with the provisions of this part and may appeal any determination rendered by SCS after such reconsideration in accordance with the Reconsideration and Appeal Procedures Regulations of SCS (7 CFR Part 614).



United States
Department of
Agriculture

Soil
Conservation
Service

P.O. Box 2890
Washington, D.C.
20012

January 30, 1987

SUBJECT: ^{CA}
~~WFP~~ - Soil Conservation Service Policy for Implementing the
Conservation Compliance Provisions of the Food Security
Act of 1985

TO: All State Conservationists

The Food Security Act (FSA) of 1985 focuses increased attention on the Soil Conservation Service (SCS) Field Office Technical Guide (FOTG). Under the provisions of FSA, conservation plans and conservation systems based on the local SCS technical guide are required if a land user who crops highly erodible lands is to retain eligibility for certain USDA programs.

The FOTG contains technical resource data and resource conservation guidelines for planning and applying resource management systems within local areas. Traditionally, these FOTG's have been used primarily to guide the quality of planning and application of conservation treatment and a fully voluntary program. Now the FOTG is tied directly to federal law and takes on increased importance. It will be more subject to public scrutiny and can become the technical basis for appeals and/or legal action.

Traditionally, the FOTG has contained information for planning and applying resource management systems to conserve, protect, and enhance the resource base. However, FSA refers to conservation systems. Conservation systems are the erosion control component of resource management systems and, as such, become the minimum acceptable level for FSA.

Reasonable and practical implementation of FSA within the time frame it contains requires that the SCS (1) carry out its role in a way that fully supports the language and the spirit of the act and, at the same time, (2) fully consider the extenuating circumstances that may cause a willing producer to be unable to comply.

Since the act contains the following language: "...a conservation plan based on the local Soil Conservation Service technical guide..." the Section III of the FOTG provides a means of accommodating exceptions.

SCS will maintain the resource management system criteria in the FOTG's. This quality level remains the goal of SCS. It will continue to be the basis for formulating conservation alternatives to be presented to land users. However, if for FSA purposes a land user indicates a desire to meet the minimum requirements of the law, the following program policy is applicable for implementation of the conservation compliance provisions.

Each FOTG shall contain a set of basic conservation systems for erosion control on cropland.



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All State Conservationists

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Basic conservation systems are those systems of conservation practices that adequately control soil erosion on cropland and would represent the cropland erosion control component of a resource management system. They are based on the traditional SCS goal for erosion control, i.e. they reduce erosion rates to the soil loss tolerance level "T" subject only to the variation associated with the reliability of the erosion prediction equations.

These systems must be defined and incorporated in the FOTG by May 30, 1987. This will normally be reflected in Section III as a field office guide sheet.

Designation of areas for use of alternative conservation compliance systems:
The state conservationist may develop sets of conservation systems that are sufficient for conservation compliance under the exception provision of the FOTG policy. These systems may be developed for defined geographic areas, soil associations, or groups of mapping units. They must specifically relate to the level of technical, economic, and social feasibility associated with compliance. A guide sheet for these systems will be included in Section III of the FOTG and will only be applicable to conservation compliance.

The state conservationist will consult with the national technical center, conservation districts, the Food and Agriculture Council, commodity group representatives, and others as appropriate in designating areas and developing these conservation systems.

The following factors will be considered in designating areas:

(i) The preponderance of highly erodible land in the area. In general, the economic impact of compliance in an area that has a high ratio of HEL to total cropland will be greater than in an area with a low ratio.

(ii) The preponderance of very highly erodible land in the designated area. In general, the economic impact of compliance in an area where the percentage of land with an erodibility index equal to or greater than 15 is high will be greater than an area where it is low.

(iii) The availability of economically acceptable cropping systems to producers in the designated area. In general, the economic impact of compliance in an area that is dependent on a very limited number of crops will be greater than in areas where a diversity of crops is more practicable.

These systems will remain in effect until December 30, 1995. After that date adjustments may be made where the conditions for which they were developed change. They must achieve a significant reduction in erosion as determined by the state conservationist.

These systems may be used as the basis for conservation plan approvals by the local conservation district(s) in the designated areas.

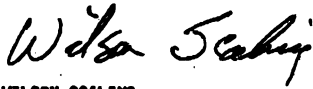
All State Conservationists

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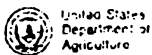
Designation of areas and development of appropriate systems should be completed by May 30, 1967. The state conservationist will report annually to the Deputy Chief for Programs the name of the counties designated for use of these systems and an estimate of the number of acres on which those systems will be applied.

The designation criteria and the systems to be used in them will be reviewed by the SCS national technical center and approved by the Deputy Chief for Programs in consultation with the Deputy Chief for Technology.

Other approval systems: Other levels of temporary treatment may be determined on a case-by-case basis under individual social or economic hardship circumstances. Guidance will be provided on this issue in the future when the responsibility of conservation districts is more clearly defined.



WILSON SCALING
Chief



United States
Department of
Agriculture

Soil
Conservation
Service

P.O. Box 2898
Washington, D.C.
20013

NATIONAL BULLETIN NO. 180-7-12

May 11, 1987

SUBJECT: CPA - IMPLEMENTATION OF THE HIGHLY ERODIBLE LANDS PROVISIONS OF
THE FOOD SECURITY ACT OF 1985

Action Required By: June 15, 1987

Purpose. To request certain basic information needed by the National Headquarters for internal use and to respond to various interests who are tracking USDA implementation of the Act.

Expiration Date. This bulletin expires October 1, 1987.

The Chief letter dated January 30, 1987 to the state conservationists provided guidance for the development of conservation systems that are to be incorporated into the Field Office Technical Guide (FOTG). These systems would then become the minimum treatment levels to be used for determining compliance with the highly erodible lands provision of the Food Security Act (FSA) of 1985.

For those areas designated in response to the Chief's letter and for which you have developed alternative systems for the purpose of compliance, please submit the following information. If you do not plan to designate areas in your state, please so indicate.

States will submit their proposed designated areas and the alternative conservation compliance systems to the NTC's by June 15, 1987. The NTC's will forward their evaluations for each proposal to the Deputy Chief for Programs.

1. Provide a state map showing the designated area or areas.
2. Identify total acres of cropland in each designated area and the acres of highly erodible cropland in each designated area that will be affected by the alternative conservation compliance system.
3. Describe the alternative conservation compliance systems to be used in each designated area. Include copies of the guide sheets developed under Section 401.3 (b)(3)(iv)(E) of the SCS Technical Guide Policy
4. Estimates of the before and after average erosion rates that are predicted for each alternative conservation compliance system in each designated area. Report these rates by ranges of erodibility index or other grouping.

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5. Briefly describe the involvement of conservation districts, commodity groups, state agencies, and others in designating areas and developing the alternative conservation compliance systems.

Approved designated areas will be determined by the Deputy Chief for Programs in consultation with the Deputy Chief for Technology.

It is permissible under certain circumstances to include in the FOTC alternative conservation systems for highly erodible lands outside of designated areas. The areas of applicability will generally be of limited size where special consideration is needed to address unique cropping systems and soil conditions. These areas are not considered designated areas and, thus, do not require review by the NTC and National Headquarters.



GALEN S. BRIDGE
Deputy Chief for Programs

203, 204(a)-(b), 206(a)-(d), 211, 217, 402(a).

(18) Exercise the administrative appeal functions of the Secretary of Agriculture in review of decisions of the Chief of the Forest Service pursuant to 36 CFR 211.18.

(24) Enter into contracts, grants, or cooperative agreements to further research, extension, or teaching programs in the food and agricultural sciences (7 U.S.C. 3318).

(25) Enter into cost-reimbursable agreements relating to agricultural research, extension, or teaching activities (7 U.S.C. 3319a).

(26) Plan and administer wildlife and fish conservation rehabilitation and habitat management programs on National Forest System lands pursuant to 16 U.S.C. 670g, 670h, and 670c.

Subpart G—Delegations of Authority by the Assistant Secretary for Natural Resources and Environment

3. Amend paragraph (a) of § 2.80 by revising paragraphs (5) and (6) and adding paragraphs (26) through (28) to read as follows:

§ 2.80 Chief, Forest Service.

(a)
(5) Administer forest insect, disease, and other pest management programs.

(6) Administer programs under section 23 of the Federal Highway Act (23 U.S.C. 101(a), 120(f), 125(a)-(c), 136, 202(a)-(b), 203, 204(a)-(b), 206(a)-(d), 211, 217, 402(a)).

(26) Enter into contracts, grants, or cooperative agreements to further research, extension, or teaching programs in the food and agricultural sciences (7 U.S.C. 3318).

(27) Enter into cost-reimbursable agreements relating to agricultural research, extension, or teaching activities (7 U.S.C. 3319a).

(28) Plan and administer wildlife and fish conservation rehabilitation and habitat management programs on National Forest System lands pursuant to 16 U.S.C. 670g, 670h, and 670c.

Dated: June 23, 1987.

For Subpart C:

Richard E. Lyng,

Secretary.

Dated: June 23, 1987.

For Subpart C:

Douglas W. MacCleary,

Deputy Assistant Secretary for Natural Resources and Environment.

[FR Doc. 87-14985 Filed 6-23-87; 8:45 am]

GULFWS CODE 319-11-2

7 CFR Part 12

Highly Erodible Land and Wetland Conservation; Request for Comments

AGENCY: Office of the Secretary, USDA.
ACTION: Interim rule with request for comments.

SUMMARY: This interim rule amends the interim rule for highly erodible land and wetland conservation which was published June 27, 1986 (51 FR 23468). This amendment pertains to the terms and conditions under which a person who has produced an agricultural commodity on highly erodible land may be declared ineligible for certain benefits provided by the United States Department of Agriculture, as provided by Subtitle B of Title XII of the Food Security Act of 1985 (Pub. L. 99-198). The amendment provides that conservation plans and conservation systems are to be based upon the Soil Conservation Service (SCS) technical guides with regard to acceptable levels of soil erosion.

DATES: Effective June 23, 1987. Comments must be received on or before August 26, 1987 to be assured of consideration.

ADDRESSES: Comments should be mailed to Director, Cotton, Grain and Rice Price Support Division, Agricultural Stabilization and Conservation Service, United States Department of Agriculture, P.O. Box 2415, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Mr. Sherman L. Lewis, Director, Conservation Planning and Application Division, Soil Conservation Service, United States Department of Agriculture, P.O. Box 2660, Washington, DC 20013. Phone: (202) 382-1848.

SUPPLEMENTARY INFORMATION: This amendment to the interim rule has been reviewed under United States Department of Agriculture ("Department") procedures established in accordance with provisions of Departmental Regulation 1512-2 and Executive Order 12291 and has been classified as "nonmajor." It has been determined that an annual effect on the economy of \$100 million or more will not result from implementation of the provisions of this amendment to the interim rule. This amendment is to the interim rule published on June 27, 1986

(51 FR 23468) for which a regulatory impact analysis was prepared.

The Secretary of Agriculture has determined that this action will not have a significant economic impact on a substantial number of small entities. The analysis prepared for the interim regulations mentioned above includes a regulatory flexibility analysis.

This program activity is not subject to the provisions of Executive Order 12372, which requires intergovernmental consultation with State and local officials. See notice related to 7 CFR Part 3015, Subpart V, published at 48 FR 29115 (June 24, 1983).

The environmental consequences associated with implementing the Highly Erodible Land Conservation provision of the Food Security Act of 1985 are addressed in the environmental assessment, dated June 1986, which was made available through the notice for the amended interim rule. The Environmental assessment recognized the uncertainty about the level of erosion reduction necessary for producers to achieve and maintain their eligibility for program benefits. Consequently environmental effects were presented that included the likely range of treatment levels. The range of levels of conservation treatment provided for in this amendment to the interim rule are within those contemplated by the assessment. Accordingly, supplementation of the environmental assessment is not required.

Because many producers of agricultural commodities for the 1987 crop year and the near future are in the process of developing or implementing their conservation plans and systems, it has been determined that the need for certainty requires this amendment to § 12.5 be effective upon publication in the Federal Register.

Discussion

Title XII of the Food Security Act of 1985 (the "Act"), Pub. L. 99-198, 16 U.S.C. 3801, *et seq.*, establishes conservation programs to abate soil erosion on highly erodible land and to protect wetlands from cultivation. The basic principles of the conservation provisions of the Act are to withhold certain federal agricultural program benefits from any person placing into agricultural commodity production highly erodible lands or wetlands. These principles are set forth in greater detail in regulations of the Department published as an interim rule on June 27, 1986 (51 FR 23468).

The Act provides exceptions to the program ineligibility provisions. For

example, section 1212(b) exempts production of agricultural commodities on highly erodible lands if such production is in compliance with a conservation plan or conservation system approved by a conservation district as being in conformity with the technical standards set forth in the Soil Conservation Service field office technical guide, or approved by the Soil Conservation Service (acting for the Secretary of Agriculture) if no local conservation district exists.

The interim rule, at 7 CFR 12.5, addresses the issue of exemptions and provides that conservation plans and conservation systems must provide for reduction of soil loss to levels not in excess of the soil loss tolerance level for the soils involved. This level is commonly referred to as "T" value. The interim rule also permits, under certain circumstances, reductions to a level not in excess of two times the soil loss tolerance level, or "2T." Many of the over 2,800 letters of comment received on the interim rule addressed the standards for soil loss. As might be expected, some comments supported the "T" standard while others felt the rigidity of the rule precluded practical solutions which might not achieve the "T" standard. Because of the importance of this matter to the implementation of the Act this year, we are hereby amending the interim rule on this issue. All other provisions of the interim rule shall remain in effect until the final rule is issued.

The Act does not prescribe "T" value standards for soil loss reductions for conservation plans and systems. Rather, it promotes a scientific and professional approach to solving soil erosion problems. The lack of specific standards in the Act itself, in addition to relevant legislative history, suggests that the Department should have the latitude to adopt and apply locally developed standards to implement the Act. See H.R. Rep. No. 447, 99th Cong., 1st Sess., 454, reprinted in 1985 U.S. Code Cong. & Ad. News 1103, 2385. To achieve the practical goals of soil loss reductions as contemplated by the Act, and in a manner which effects fair and reasonable determinations of ineligibility, this amendment to the interim rule substitutes the use of required conservation systems as provided for in the Soil Conservation Service (SCS) field office technical guides as opposed to reliance on soil loss tolerance levels characterized by "T" values.

The field office technical guides are being revised, as needed, to contain criteria and required conservation

systems necessary for producers to maintain eligibility for USDA program benefits. These systems will take into consideration soil erodibility, conservation system effectiveness, economics, and other factors related to local areas. These revisions will have the effect of eliminating a rigid "T" standard for soil and crop situations where is it not economically or technically feasible or practical to achieve "T". These conservation compliance systems will achieve a substantial reduction in existing erosion rates. The acceptable conservation systems included in the SCS field office technical guides will be reviewed by the SCS National Technical Centers and concurred in by the SCS state conservationist. This review and concurrence requirement will ensure that the maximum feasible amount of erosion reduction will be achieved while permitting necessary flexibility.

In proposing this change away from the rigid standards for soil loss, the Department recognizes that the ideal goal of any conservation plan or system would be to reduce soil loss to the soil loss tolerance level. This approach will remain as a goal and an option, but not as a requirement. However, the Department believes that the Act's ultimate objectives will be more effectively achieved through reliance on the professional soil conservationist's ability to apply judgment based on the field office technical guides. The Department believes that a majority of the highly erodible cropland treated under this provision will achieve erosion reduction approaching the allowable soil loss tolerance level (T value). Comments on any other approaches such as establishing maximum allowable soil loss levels or requiring a minimum percentage of erosion reduction to be achieved may be submitted to USDA.

List of Subjects in 7 CFR Part 12

Highly erodible land, Wetland, Conservation, Price support programs, Federal Crop Insurance, Farmers Home Administration loans, Incorporation, Loan programs—Agriculture, Environmental protection.

For the reasons set forth in the discussion, Part 12 of Title 7 of the Code of Federal Regulations is amended as follows:

PART 12—HIGHLY ERODIBLE LAND AND WETLAND CONSERVATION

1. The authority citation for Part 12 continues to read as follows:

Authority: Secs. 1201-1223, 1241-1244 of Pub. L. 90-198 (90 Stat. 1804 et seq.; 16 U.S.C. 3801-3823, 3841-3844).

§ 12.5 (Amended)

2. In § 12.5 paragraph (b)(2) is revised to read as follows:

(2) A conservation plan, or a conservation system developed for the purposes of paragraph (c) of this section, will be based upon the SCS field office technical guide, addressing considerations of economic and technical feasibility and other related factors.

3. In § 12.5 paragraph (b)(3) is removed.

George S. Dunlap,
Assistant Secretary, Natural Resources and Environment,
June 24, 1987.
[FR Doc. 87-14094 Filed 6-28-87; 8:45 am]
BILLING CODE 3410-01-8

Agricultural Marketing Service

7 CFR Part 911

(Amdt. No. 6)

Limes Grown in Florida; Amendment to Rules and Regulations; Daily Pack-Out Reports

AGENCY: Agricultural Marketing Service, USDA.

ACTION: Final rule.

SUMMARY: This rule requires lime handlers to report to the Florida Lime Administration Committee the daily pack-out of selected sizes of limes during the entire twelve-month season. Handlers already are required to report this information to the committee during the March through June period of each season. The collection and dissemination of such information is necessary to assist growers and handlers in making better harvesting and marketing decisions.

EFFECTIVE DATE: July 28, 1987.

FOR FURTHER INFORMATION CONTACT: James M. Scanlon, Acting Chief, Marketing Order Administration Branch, F&V, AMS, USDA, Washington, DC 20250. Telephone: (202) 475-3914.

SUPPLEMENTARY INFORMATION: This rule has been reviewed under Executive Order 12291 and Departmental Regulation 1512-1 and has been determined to be a "non-major" rule under criteria contained therein.

In compliance with the Office of Management and Budget (OMB) regulations (5 CFR Part 1220) which implement the Paperwork Reduction Act

Rules and Regulations

Federal Register
Vol. 53, No. 28
Thursday, February 11, 1988

This section of the FEDERAL REGISTER contains regulatory documents having general applicability and legal effect, most of which are keyed to and codified in the Code of Federal Regulations, which is published under 50 titles pursuant to 44 U.S.C. 1510. The Code of Federal Regulations is sold by the Superintendent of Documents. Prices of new books are listed in the first FEDERAL REGISTER issue of each week.

DEPARTMENT OF AGRICULTURE

Office of the Secretary

7 CFR Part 12

Highly Erodible Land and Wetland Conservation; Correction

AGENCY: Office of the Secretary, USDA.
ACTION: Final rule; correction.

SUMMARY: This final rule amends the provisions of 7 CFR Part 12 which set forth the conservation system requirements under which the eligibility of a person, who has produced an agricultural commodity on highly erodible land, is determined for certain benefits provided by the United States Department of Agriculture, i.e., commodity price support or production adjustment payments, farm storage facility loans, disaster payments, payments for storage of grain owned by the commodity credit corporation, Federal crop insurance, and loans administered by the Farmers Home Administration, as required by Subtitles B and C of Title XII of the Food Security Act of 1985, Pub. L. 99-198, 16 U.S.C. 3801 *et seq.*, and makes typographical corrections to other provisions of 7 CFR Part 12.

EFFECTIVE DATE: February 11, 1988.

FOR FURTHER INFORMATION CONTACT: Mr. Sherman L. Lewis, Director, Conservation Planning Division, Soil Conservation Service (SCS), United States Department of Agriculture, P.O. Box 2890, Washington, DC 20013, telephone: (202) 382-1845. Copies of the environmental assessment and regulatory impact analysis prepared for promulgation of 7 CFR Part 12 are available through this office.

SUPPLEMENTARY INFORMATION: This rule has been developed pursuant to Subtitle B of Title XII of the Food Security Act of 1985 (the "Act"), 16 U.S.C. 3801 *et seq.* Those provisions of the Act remove the

incentive that certain benefits from the United States Department of Agriculture (USDA or the Department) could otherwise provide persons to cultivate highly erodible land for the purpose of producing an agricultural commodity. Section 1211 of the Act, 16 U.S.C. 3811, provides generally that any person who produces, without an approved conservation system, an agricultural commodity on a field in which highly erodible land is predominant will be ineligible for commodity price support or production adjustment payments, farm storage facility loans, disaster payments, payments for storage of Commodity Credit Corporation-owned grain, or Federal crop insurance. Also, any such person will be ineligible for loans made, insured, or guaranteed under any provision of law administered by the Farmers Home Administration if it is determined that the proceeds of such loan will be used for a purpose that will contribute to excessive erosion of highly erodible lands.

This final rule amends, 7 CFR 12.5(b)(2) and (3), which were published in an interim rule on June 27, 1986 (51 FR 23498) and subsequently amended by an interim rule published on June 28, 1987 (52 FR 24132). As discussed in the preamble of the final rule publication of 7 CFR Part 12 of September 17, 1987 (52 FR 35198-35197), the amended portion has been moved from § 12.5 to § 12.23.

This final rule identifies the development base for the technical requirements for conservation plans and systems needed by persons who produce agricultural commodities on highly erodible cropland and desire to maintain eligibility to participate in certain USDA programs.

The technical requirements established by this final rule will be implemented by the Soil Conservation Service in carrying out their technical assistance responsibilities as specified in 7 CFR Part 12. Other portions of the highly erodible land and wetland conservation provisions of Part 12 are implemented by the Agricultural Stabilization and Conservation Service, the Commodity Credit Corporation, the Farmers Home Administration, the Federal Crop Insurance Corporation, Extension Service, as well as the Soil Conservation Service (SCS).

This rule has been reviewed under the USDA procedures established in accordance with provisions of Departmental Regulation 1515-1 and

Executive Order 12291 and has been classified as "non-major." It has been determined that there will not be an annual effect on the economy of \$100 million or more from implementation of the provisions of this rule. A regulatory impact analysis was prepared for the promulgation of 7 CFR Part 12, a section of which this rule amends. Copies of that regulatory impact analysis are available from the previously mentioned information contact office.

The titles and numbers of the Federal assistance programs to which this rule applies are: Commodity Loans and Purchases—10.051; Cotton Production Stabilization—10.052; Emergency Conservation Program—10.054; Emergency Loans—10.404; Farm Operating Loans—10.408; Farm Ownership Loans—10.407; Feed Grain Production Stabilization—10.055; Storage Facilities Equipment Loans—10.056; Wheat Production Stabilization—10.058; National Wool Act Payment—10.059; Beekeeper Indemnity Payments—10.060; Rice Production Stabilization—10.066; Federal Crop Insurance—10.450; Soil and Water Loans—10.418; Loans to Indian Tribes and Tribal Corporations—20.421, as found in the Catalog of Federal Domestic Assistance.

This rule is not subject to the provisions of Executive Order 12372, which requires intergovernmental consultation with State and local officials. See notice related to 7 CFR Part 3015, Subpart V, published at 48 FR 29115 (June 24, 1983).

It has been determined that promulgation of this rule does not constitute a major federal action significantly affecting the quality of the human environment. An environmental assessment, dated September 1987, was prepared in conjunction with the development of the final rule regarding 7 CFR Part 12 in general, the interim amended rule, 7 CFR 12.23(a), and the related finding of no significant impact, which were published at 52 FR 35194 (September 17, 1987). The range of environmental effects considered in that environmental assessment recognizes the uncertainty which exists regarding the extent of producer compliance with the requirements of the rule, the actual erosion control measures that persons will adopt to maintain eligibility for USDA program benefits, and the actual erosion reduction that may result from those control measures.

Based on review of the environmental assessment and finding of no significant impact prepared for the interim rule, it has been determined that implementation of this final rule will not significantly affect the quality of the human environment. Copies of the finding of no significant impact and environmental assessment are available from the information contact office previously mentioned.

Discretion of Comments and Changes

USDA received 242 letters responding to the interim rule amendment and request for comments issued on June 28, 1987. Entities responding included individuals, corporations, environmental groups, state and local governments, Federal agencies, farm commodity groups, financial institutions, members of Congress and others. Comments came from 37 states and the District of Columbia. Approximately 103 of the letters were form letters containing identical responses.

The background of this rule, including the reasons for and purposes of the amendment, is set forth in the preamble of the interim amendment of June 28, 1987 (52 FR 24132) and the final rule of September 17, 1987 (52 FR 35194, 35198-35197). This final rule is based upon USDA's experience in implementing these regulations since June 27, 1986, and the public's response to the interim rule amendment published June 28, 1987. Additionally, typographical errors in the final rule publication of September 27, 1987, have been discovered and corrections are made by this rule.

One hundred ninety-nine respondents, including 103 prescribed responses, favored reliance on the SCS field office technical guide requirements for conservation plans and systems rather than the rigid soil loss tolerance (T) and ZT requirements specified in the interim rule of June 28, 1986. Generally, these respondents stated that the amended interim rule allowed needed flexibility in developing conservation plans and conservation systems that would be based on local resource conditions, available conservation technology, and the cost-effectiveness of the required conservation treatment.

Thirty-nine respondents either had recommendations concerning the applicability of the change to highly erodible lands that had not previously been used to produce agricultural commodities prior to passage of the Act, or simply opposed the change. Those respondents who recommended changes to the amended interim rule recognized the need for a degree of flexibility in conservation plan and system requirements for existing highly erodible

cropland, but had reservations about applying the flexible requirements to situations where non-cropped rangeland, native pastured or woodland are strictly cultivated, "broken out" or "restored", for crop production. They indicated that landowners and users in those circumstances did not have a previously established and continuing economic dependence on the "broken out" land for crop production, nor an interest in protecting crop bases or far commodity export prices on the affected acreage.

Those who simply opposed the change in the rule were concerned that this action represented a general weakening of soil loss reduction standards and would place even more pressure on local SCS and conservation district officials to make more changes which would further reduce erosion reduction requirements.

The Department has determined that substantive changes in the rule are not warranted on the basis of either the comments received or the experience obtained as a result of promulgation of the interim rule. Conservation plan and system requirements for highly erodible land conservation purposes should continue to be based on the local SCS field office technical guide. The SCS field office technical guide is the agency's standard field document for recording the criteria, requirements, standards and considerations for planning and applying conservation treatment to the land. Reliance upon its use is the agency's method for practical field application of current, proven conservation technology and research. The guide blends conservation technology and research information with local, site-specific resource data to allow professional conservationists to develop practical and feasible conservation treatment alternatives for land users.

Traditionally, the SCS field office technical guide's primary criterion for judging the adequacy of erosion control have been estimates of erosion based on formulas for sheet and rill erosion by water and wind erosion relative to the presumed soil loss tolerance of a soil. The soil loss tolerance level is an approximation of the rate of erosion at which the productivity of a soil can be maintained indefinitely; in other words, the approximate point of nondegradation of the soil's productivity. Estimates of erosion rates are subject to the measurement limitations of the soil loss equations.

Use of the soil loss tolerance level in the design of acceptable resource conservation system alternatives is an excellent tool for establishing a

quantitative goal for both the professional conservationist and landowners. Of course, the resulting conservation system may not be economically feasible and, therefore, may under the voluntary conservation program, be modified to satisfy site specific conditions.

Under the conservation provisions of the Act, however, landowners who produce agricultural commodities on highly erodible cropland and want to maintain their eligibility for USDA program participation do not have the same freedom that the landowner has under the voluntary program. They must comply with the requirements as set forth in the field office technical guide or lose program eligibility. The Department believes that, for certain soil and crop situations, an alternative conservation system(s) should be included in the field office technical guide that will achieve a substantial reduction in existing soil loss levels, but at the same time be cost-effective for the given situation.

Accordingly, SCS has incorporated alternative conservation systems in the field office technical guides. These conservation systems are based upon current technology for controlling erosion with consideration given to the cost of attaining added increments of erosion control as the systems performance approaches a point of nondegradation of the soil resources. These systems will provide for nondegradation on approximately 85 percent (180 million acres) of the highly erodible cropland subject to the conservation compliance requirements of the Act. The balance of the highly erodible cropland will erode at levels slightly above the nondegradation level under the alternative systems while they are used for agricultural commodity production.

The conservation systems in the field office technical guide are reviewed by local agricultural and soil conservation groups and by the SCS National Technical Center and are approved by the SCS state conservationists before they may be used in conservation plans and systems in order to comply with the Act.

Although the regulations are not being substantively changed by this final rule, the text of the rule has been changed as a result of the review of many of the comments, to clarify the applicability of the various conservation systems contained in the field office technical guide. Alternative conservation systems available for highly erodible cropland presently in crop production or that has a cropping history generally will not be applicable to those situations where

native vegetation, i.e., range land and woodland, are "broken out" for agricultural commodity production. For the most part, these lands are very fragile and very sensitive to increases in erosion. Additionally, as noted in the comments, persons who break out these lands are in a different position with regard to the economic consequences of implementing the conservation requirements than are those who have been using their land for commodity production, since crop bases or commodity price support eligibility are not yet established for the broken-out fields. Requiring the conservation systems on these lands to be more stringent than those applicable to existing cropland fields does not unfairly or unreasonably impose an economic hardship on producers who want to bring new land into production.

Conservation systems acceptable for use in "sodbusting" of highly erodible land in native vegetation will be documented in the field office technical guide. In most, if not all cases, they will consist of conservation systems prescribed by the field office technical guides for achieving and maintaining nondegradation of the soil resources.

List of Subjects in 7 CFR Part 12

Highly erodible land, Wetland conservation, Price support programs, Federal crop insurance, Farmers Home Administration loans, Incorporation by reference, Loan programs—Agriculture, Environmental protection.

Accordingly, Part 12 of Title 7 of the Code of Federal Regulations is amended as follows:

PART 12—HIGHLY ERODIBLE LAND AND WETLAND CONSERVATION

1. The authority citation for Part 12 continues to read as follows:

Authority: 16 U.S.C. 3801-3823, 3841-3844.

§ 12.1 [Corrected]

2. Section 12.1(b)(3) is corrected by changing "Produce" to read "Reduce".

§ 12.2 [Corrected]

3. Section 12.2(a)(2) is corrected by changing "hydric soil" to read "hydric soil".

§ 12.5 [Corrected]

4. Section 12.5(c) is amended by deleting the word "this" where it appears in front of the term "paragraph (b)(3)".

5. Section 12.5(a) is revised to read as follows:

§ 12.23 Conservation plans and conservation systems.

(a) A conservation plan or a conservation system developed for the purposes of § 12.5(b) must be based on and in conformity with the SCS field office technical guide. For highly erodible croplands which were in production prior to December 23, 1985, the applicable conservation systems in the field office technical guide are designed to achieve substantial reductions in soil erosion, taking into consideration economic and technical feasibility and other resource related factors. For highly erodible lands that are converted from native vegetation, i.e., rangeland or woodland, to crop production after December 23, 1985, the applicable conservation systems in the field office technical guide are designed to control soil losses to a level that will attain or approximate the soil loss tolerance level. Any conservation plans or systems that were approved prior to February 11, 1988, are deemed to be in compliance with this paragraph.

6. Section 12.31(c)(3)(i) is amended by revising the second sentence to read as follows:

§ 12.31 Wetland identification criteria.

(c) Artificial wetland. * * *

(3) * * *

(i) *Plant classification.* * * * Obligate species are expected to occur in wetlands more than 99 percent of the time; facultative wet species, 66-99 percent of the time; facultative species, 33-66 percent of the time; facultative upland species, 1-32 percent of the time; and upland species, less than 1 percent of the time.

Signed at Washington, DC, on January 13, 1988.

Richard E. Lyng,

Secretary.

[FR Doc. 88-3287 Filed 2-10-88; 8:45 am]
BILLING CODE 3410-01-4

Animal and Plant Health Inspection Service

7 CFR Part 301

[Docket No. 88-001]

Movement of Citrus Fruit From Florida

AGENCY: Animal and Plant Health Inspection Service, USDA.
ACTION: Final rule.

SUMMARY: Before the effective date of this final rule, fruit regulated because of citrus canker could not be moved

interstate from Florida to commercial citrus-producing areas of the United States. This final rule allows fruit regulated because of citrus canker to be moved interstate from Florida to any destination in the United States, including commercial citrus-producing areas, under certain conditions. This action is necessary to relieve unnecessary restrictions on the interstate movement of fruit that presents a negligible risk of causing the interstate spread of citrus canker. This final rule also clarifies our requirements for moving regulated fruit interstate of parts of the United States that are not commercial citrus-producing areas.

EFFECTIVE DATE: February 9, 1988.

FOR FURTHER INFORMATION CONTACT: Eddie W. Elder, Chief Operations Officer, Domestic and Emergency Operations Staff, Plant Protection and Quarantine, APHIS, USDA, Room 610, Federal Building, 6505 Belcrest Road, Hyattsville, MD 20782; 301-436-6365.

SUPPLEMENTARY INFORMATION:

Background

Citrus canker is a plant disease caused by strains of the bacterium *Xanthomonas campestris* pv. *citri* (Haase) Dye. The disease is known to affect plants and plant parts including fruit, of citrus and citrus relatives (Family Rutaceae). It can cause defoliation and other serious damage to the leaves and twigs of susceptible plants. It may also make the fruit of diseased plants unmarketable by causing lesions on the fruit. Infected fruit may also drop from trees before reaching maturity. Some strains of citrus canker are an aggressive disease that can infect susceptible plants rapidly and lead to extensive economic losses in citrus growing areas.

To help prevent the spread of this disease, we regulate the interstate movement of certain plants, plant parts, and other articles from areas of the United States quarantined because of citrus canker. These regulations are contained in 7 CFR Part 301.75 and are referred to below as the regulations.

Regulated articles include plants or plant parts, including fruit and seeds, of all species, clones, cultivars, strains, varieties, and hybrids of the general *Citrus* and *Fortunella*; and all clones, cultivars, strains, varieties, and hybrids of the species *Poncirus trifoliata* (which includes lemon, pummelo, grapefruit, key lime, persian lime, tangerine, satsums, tangor, citron, sweet orange, sour orange, mandarin, tangelo, ethrog, kumquat, limequat, calamondin, and trifoliolate orange); and any other product,



United States
Department of
Agriculture

Soil
Conservation
Service

P.O. Box 2890
Washington, D.C.
20013

5/30/88

May 3, 1988

NATIONAL BULLETIN NO. 180-8-31

SUBJECT: CPA - INCLUSION OF ALTERNATIVE CONSERVATION SYSTEMS
FIELD OFFICE TECHNICAL GUIDES

Action Required By: June 15, 1988

Purpose. To set forth the policy on the use of alternative conservation systems for compliance on highly erodible land.

Expiration Date. December 31, 1990

Alternative Conservation Systems (ACS) are various mixes of conservation practices that are considered to achieve acceptable FSA erosion control on highly erodible cropland. They are combinations of practices that substantially reduce erosion on highly erodible cropland being planted to agricultural commodities.

ACS are to be included in all field office technical guides where there is highly erodible land subject to the compliance provision of the 1985 Food Security Act. ACS will be developed for all HE soils, either as individual soil map units or as groups of soil map units, subject to FSA compliance requirements.

ACS are developed for specific soil-crop combinations and will reflect practical, cost-effective solutions for reducing erosion.

ACS are to be consistent across county and state lines where the same soil-crop situation is shared. This is a state conservationist responsibility. NTCs verify coordination among states. Once an ACS is developed, it is included in a guide sheet, labeled as applicable on FSA highly erodible cropland conservation, and filed in the FOTG as an alternative conservation system. It is then available for selection by every farmer with that soil-crop situation in that FOTG area, unless the farmer is converting native vegetation.

No reference to "T" should appear on the guide sheets. Use of "T" terminology for ACS can be misleading and cause confusion. It is often misinterpreted as a minimum standard.

Local agricultural commodity groups, ASCS county committees, conservation districts and others should be consulted in the development of ACS. ACS are to be reviewed by the NTCs and approved by the state conservationist.

Wilson Scaling
WILSON SCALING
Chief

DIST: 0



The Soil Conservation Service
is an agency of the
Department of Agriculture

Senator HARKIN. Mr. Scaling, welcome to the subcommittee. I have a copy of your prepared testimony and it will be made a part of the record in its entirety and I would like to ask you to proceed, if you could, to summarize your statement and perhaps hit upon the points that I made in mine.

STATEMENT OF WILSON SCALING, CHIEF, SOIL CONSERVATION SERVICE, U.S. DEPARTMENT OF AGRICULTURE, ACCOMPANIED BY R. MACK GRAY, ASSISTANT TO THE CHIEF FOR STRATEGIC PLANNING AND BUDGET ANALYSIS, U.S. DEPARTMENT OF AGRICULTURE

Mr. SCALING. Good morning. I am Wilson Scaling. I am Chief of the Soil Conservation Service.

This is somewhat controversial. I think it is very simple. I think it is so simple it is unreal.

The interim rule issued in June 1986 required that conservation systems for highly erodible cropland had to reduce erosion down to the soil loss tolerance—"T" value—level or, in case of hardship, as you said, to a level not to exceed 2T. Up until this time we had used T value as a guide for developing conservation systems for farmers and ranchers who voluntarily came in for our technical assistance. It had never been a standard that farmers were required to implement.

We held a hearing. A lot of public comments, hundreds of thousands of public comments came in. It was felt that to achieve a level of erosion reduction to T value, many producers across the country would have to take large amounts of land out of cultivated production or incur excessively high capital investment costs in order to remain eligible for USDA program benefits. For these reasons, our procedure, as incorporated into the final rules, based the Food Security Act conservation systems on the SCS field office technical guides. Those systems do achieve substantial reductions in erosion rates, and we believe that approach is consistent with the intent of the act.

Some of the systems in our technical guides do go to T. Some do not. I have instructed our State conservationists that conservation systems proposed for use in a local technical guide were to be developed in consultation with the local conservation district and other agricultural groups—and then reviewed by our SCS national technical centers. Then they would be approved by the State conservationist.

As I said, they do achieve alternatives that go to T, and some that do not go to T, somewhat less than that. And some that exceed T.

We found, in the Midwest, the States of North Dakota, South Dakota, Nebraska, Minnesota, Iowa, Missouri, Wisconsin, Illinois, Indiana, and Ohio, that the current average rate of erosion on highly erodible land is about 15 tons per acre per year. If all highly erodible lands were treated with the alternative conservation systems, erosion on highly erodible land in this region would be reduced to an average of around 8.5 tons per acre per year. That is taking into account the acres that have already been enrolled in Conservation Reserve Program, the average erosion rate on all

highly erodible land in those States would be just a little over 6.5 tons per acre per year.

I believe, personally, that many, many producers will voluntarily choose conservation systems that will reduce erosion on their lands to rates below the soil loss tolerance level. I have done that myself on my land. We estimate that these individual actions will reduce erosion from an average of about 15 tons per acre per year to somewhere between 5 and 6.5 tons per acre per year. That is a reduction of around 60 to 70 percent.

In Iowa, for instance, which is where you are from, Senator Harkin, of the 8.2 million acres of highly erodible land, just a little under 5 million acres have an erosion potential exceeding 70 to over 190 tons per acre per year. The actual erosion rate on that land, however, only averaged a little over 26 tons per acre in 1982. Now if Iowa farmers had not already applied conservation measures, the erosion rate would still have exceeded better than 60 tons per acre per year. We estimate that the alternative conservation systems we are proposing will reduce erosion on these lands to somewhere between 6 and 8 tons per acre per year. That is still above T value. If we required that T value be attained, the majority of this land would have to be taken out of corn and soybeans and converted to hay or pasture. It just makes absolutely no sense to convert Iowa into the world's largest alfalfa patch over a ton, to 2 tons, to 3 tons of erosion per acre per year—especially when you already have 80 to 90 percent of the farmers taking conservation measures voluntarily and it is not going to adversely affect their farming operations.

Also, if a farmer in Iowa or anyplace else, already has a conservation system or a plan that equals or exceeds the erosion reduction of the alternatives in our technical guides, whether or not it exactly matches what we have, we are going to consider that an acceptable conservation system.

In the past few weeks, there has been a lot of concern expressed, particularly from some of the Midwestern States, that our policy of allowing producers the flexibility to choose alternative conservation systems is going to somehow undermine State soil conservation programs or reduce sign-up in the Conservation Reserve.

Allowing reasonable and practical alternatives for erosion control is a policy that offers no threat to any State programs or objectives. As a matter of fact, it compliments it. If a State program requires treatment to the T value level, the field office technical guides, as I said before, do provide alternatives that achieve that objective as well as alternatives that do not. The conservation districts can, and in many cases will, encourage producers to achieve the maximum potential of soil loss reduction. But I just do not believe it is appropriate to use Federal authority, such as that contained in the highly erodible land conservation provision to force achievement of any State or any other goal that is extraneous to the act.

The concern expressed that enrollment in the Conservation Reserve Program will decline because producers are not facing the threat of a mandatory compliance, I just do not think that is valid either.

In a hearing held in the House Subcommittee on Conservation, Credit, and Rural Development on the 9th, there were concerns expressed that in some areas, the technical guides contain alternative systems that would not reduce erosion to reasonable levels. I assured Chairman Jones that that was not the case.

I sent a letter to all SCS State conservationists, instructing them to review the field office technical guides in their State and, if they found some alternative systems there that were way too liberal, let us reduce them. Let us bring them down and tighten them up a little bit. But at the same time, sir, if they found some that were too tight, too restrictive, let us loosen them.

As I view compliance, it has to live and breathe, just like agriculture. I know, I myself served, all my life, until I came up here. I operated a working ranch. That is all I have ever done. I am probably one of a handful of people in USDA that did come directly off the land up here. I know that farmers and ranchers will voluntarily do conservation, the people that have never worked with SCS, if they feel that this is fair, if they have a fair shot at it.

But if they feel they are having something cranked down their throat, they are just not going to participate in it. We are going to get more conservation on the ground by going the alternative route across the United States, and this is a national program, by being flexible, by working with local people at a local level because that is where Government works best, is at a local level, that we can have in something else being driven out of Washington down the throats of our farmers and ranchers.

I believe that very strongly, sir. Thank you.

If there are any questions, I or my staff would be glad to answer them.

[The proposed statement and attachments of Mr. Scaling follow.]

STATEMENT OF WILSON SCALING, CHIEF, SOIL CONSERVATION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE

Mr. Chairman, Members of the Committee, I am Wilson Scaling, Chief of the Soil Conservation Service. It is a pleasure to appear before your committee to discuss implementation of the conservation compliance provision of the Food Security Act of 1985.

The conservation compliance provision is among the most important features of the conservation title. It is also one of the most controversial, and will probably continue to remain so. I am convinced, Mr. Chairman that conservation compliance, as it is being implemented in tandem with the Conservation Reserve Program, will be very effective in reducing erosion on highly erodible lands.

I would like to briefly discuss the process that we used in implementing the conservation compliance provision. Except for an amendment and corrections made on February 11, 1988, all final Sodbuster and Swampbuster rules were in place as of September 1987.

Getting to this final rule stage took a lot of work. SCS and other USDA agencies reviewed more than 8,000 public comments which were submitted in response to interim rules issued in June of 1986.

Many comments dealt with the level of erosion reduction that farmers would be expected to achieve under the Highly Erodible Land provisions. This turned out to be such an important issue that I will explain what transpired.

The interim rule issued in June 1986 required that conservation systems for highly erodible cropland had to reduce erosion down to the soil loss tolerance ("T" value) level or, in the case of hardship, to a level not to exceed 2T. Up until this time we had used T value as a guide for developing conservation systems for farmers and ranchers who voluntarily came in for our technical assistance. It had never been a standard that farmers were required to implement.

Hundreds of public comments on the interim rule indicated that following a rigid national standard for erosion reduction would jeopardize agricultural producers in many parts of the country. To achieve a level of erosion reduction to T value, many producers across the country would have to take large amounts of land out of production or incur excessively high capital investment costs to remain eligible for USDA program benefits. For these reasons, our procedure as incorporated into the final rules, based FSA conservation systems on the SCS field office technical guides. These systems do achieve substantial reductions in erosion rates, and we believe this approach is consistent with the intent of the Act.

The guides have been revised to contain conservation systems that are economically and technically feasible for the local area. Some of the systems reduce erosion to T value and some do not. I instructed our state conservationists that conservation systems proposed for use in a local technical guide were to be developed in consultation with the local conservation district and other agricultural groups. and reviewed by SCS national technical centers They were then approved by the state conservationist. The systems contained in the technical guides will provide substantial reductions in erosion on highly erodible cropland...and every field office technical guide contains alternatives that will achieve T value

We are not surrendering technical quality. All conservation systems planned and installed under FSA must meet practice standards and specifications included in the field office technical guide.

We have completed an analysis of the impact of implementing conservation compliance under the policy of using economically and technically feasible conservation systems in the states covered by our Midwest Technical Center at Lincoln, Nebraska. This analysis covered the states of North Dakota, South Dakota, Nebraska, Minnesota, Iowa, Missouri, Wisconsin, Illinois, Indiana, and Ohio. We have found that the current average rate of erosion on highly erodible land in these states is almost 15 tons per acre per year. If all highly erodible lands were treated with the alternative conservation systems, erosion on highly erodible land in this region would be reduced to an average of about 8.5 tons per acre per year. Taking into account the acres that have already been enrolled in the CRP the average erosion rate on all highly erodible land in these states would be just over 6.5 tons per acre per year after the plans developed for conservation compliance are implemented

We believe that many producers will voluntarily choose conservation systems that will reduce erosion on their lands to rates below the soil loss tolerance level. We estimate that these individual actions will reduce erosion from an average of approximately 15 tons per acre per year to between 5 and 6.5 tons per acre per year - a reduction of 60 to 70 percent.

Mr. Chairman, I would like to cite your state of Iowa as an example.

Of the 8.2 million acres of highly erodible land in Iowa, over 4.9 million acres have an erosion potential exceeding 70 to over 190 tons per acre per year. The actual annual erosion rate on this land averaged over 26 tons per acre in 1982. If Iowa farmers had not already applied conservation measures, the erosion rate would have exceeded 60 tons per acre. We estimate that the alternative conservation systems we are proposing will reduce erosion on these lands to an average of between 6 and 8 tons per acre per year. This is still above "T" value. If we required that "T" value be attained, much of this land would have to be

taken out of corn and soybeans and converted to hay or pasture. It just doesn't make sense to me to turn Iowa into the world's largest alfalfa patch over a mere 2-3 tons of erosion--especially when farmers are willing to reduce erosion by 80 to 90 percent with conservation systems that will not adversely affect their farming operations.

I also want to make it clear that if a farmer already has a conservation system or plan that equals or exceeds the erosion reduction of the alternatives in our technical guide--whether or not it matches exactly the systems we have included--that, too, will be considered an acceptable conservation system or plan.

In the past few weeks, we have had concern expressed, particularly from some of the Midwest States, that our policy of allowing producers the flexibility to choose alternative conservation systems will somehow undermine state soil conservation programs or reduce signup in the Conservation Reserve Program by removing or reducing the threat of program ineligibility. Let me address these concerns head on!

First, allowing reasonable and practical alternatives for erosion control is a policy that offers no threat to state programs or objectives. If a state program requires treatment to the "T" value level, the field office technical guides will provide alternatives that achieve this objective as well as alternatives that do not. The conservation districts can and in many cases will, encourage producers to achieve erosion reduction to T value. This is appropriate. However, I simply do not believe that it is appropriate to use a federal authority such as that contained in the Highly Erodible Land conservation provision of the Food Security Act to force achievement of a state or any other goal that is extraneous to the Act.

The concern expressed that enrollment in CRP will decline because producers are not facing the threat that conservation compliance will force them out of business or require major capital investments is not valid. We do not believe the intent of the conservation compliance provisions was to put farmers out of business. We believe the provisions were intended to achieve substantial soil loss reduction with reasonable (not excessive) capital investments.

The CRP has been and continues to be an outstanding and successful program. We have seen producers enroll over 25.5 million acres in the program in just over 2 years. The enrollment of this land into CRP will reduce erosion from cropland by over 530 million tons annually. Producers do not need to be coerced into the Conservation Reserve Program.

As an example, in the latest CRP signup that ended on August 31, 1988, participation in the states of Iowa, Illinois, Indiana, Michigan, Ohio, and Wisconsin made up 15.6 percent of enrolled acres. In the previous six signups, the percentage of total enrollment in these states made up only 10.9 percent of the total. Obviously the producers in the Midwest have not "backed away" from the Conservation Reserve. The proportion of acres enrolled by midwestern farmers has increased. As I said earlier, farmers do not need to be coerced into this program.

Mr. Chairman, I operated a working ranch all of my adult life prior to becoming Chief of the Soil Conservation Service. I know that if a program is to be successful with producers it must be seen as being fair and not arbitrary. This program could not be administered if producers believed that they were being forced to develop and carry out plans that would destroy them economically. We must have the good will and support of farmers and ranchers to successfully implement the conservation compliance provision.

Where highly erodible lands in native vegetation such as range and woodland are broken out for agricultural commodity production, the applicable conservation systems are restricted to those that achieve T value. This restriction will discourage conversion of our highly erodible native range and woodland to cropland, as we believe Congress intended.

For other lands using technical guide criteria instead of rigid T values is a reasonable and practical approach to substantially reducing erosion on highly erodible cropland without placing unnecessary burdens on the Nation's farmers.

In a hearing held by the House Subcommittee on Conservation, Credit, and Rural Development on August 9th, there were concerns expressed that in some areas, the technical guides contained alternative conservation systems that would not reduce erosion to reasonable levels. In order to assure that this is not the case, I sent a letter to all SCS state conservationists instructing them to review the field office technical guides in their state and modify any systems that either require an unreasonable level of erosion reduction or do not achieve an appropriate reduction in a reasonable and practical manner. I would like to submit a copy of this letter for the record.

Thank you, Mr. Chairman, for the opportunity to appear before your committee. I will be happy to attempt to answer any questions that you or other members of the committee might have.

Attachments follow:



United States
Department of
Agriculture

Soil
Conservation
Service

P.O. Box 2690
Washington, D.C.
20013

21 SEP 1985

SUBJECT: PGM - Food Security Act of 1985

TO: All State Conservationists

On August 9, 1988 the Conservation, Credit and Rural Development Subcommittee of the House Agriculture Committee conducted a public hearing on implementation of the conservation provisions of the Food Security Act of 1985. The Subcommittee, chaired by Congressman Ed Jones of Tennessee, focused attention on the use of alternative conservation systems (ACS) for conservation compliance.

Information that we presented at the hearing indicated ACS will achieve substantial overall erosion reduction—an estimated 60 to 70 percent in average erosion rates. However, some who testified cited individual situations where they thought ACS would result in unreasonably high erosion rates after treatment.

I believe the examples cited are not at all representative of ACS and that the process we went through of having your approval following review by the NTC's ensured that such systems rarely, if ever, exist. I did, however, make a commitment to Chairman Jones that we would review the ACS included in our field office technical guides to ascertain their effectiveness in achieving compliance objectives by not allowing unreasonable rates of erosion to persist.

I am asking each of you, through your normal oversight and appraisal of field office operations, to review your ACS. Any ACS, which in your professional judgement are not meeting compliance objectives, should be modified to achieve appropriate reduction in erosion in a reasonable and practical manner. This review should also identify and adjust any ACS that in your judgement are requiring an unreasonable level of erosion reduction.

Wilson Scaling

WILSON SCALING
Chief



The Soil Conservation Service
is an agency of the
Department of Agriculture

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10-79

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United States Senate

COMMITTEE ON
AGRICULTURE, NUTRITION, AND FORESTRY
WASHINGTON, DC 20510-8000

October 7, 1988

Mr. Wilson Scaling
Chief
Soil Conservation Service
U.S. Department of Agriculture
14th and Independence Streets, S.W.
Washington, D.C. 20250

Dear Mr. Scaling:

I appreciate your testifying before the Committee on October 4, 1988. Enclosed are additional questions which are being submitted to you for written answers. As you indicated in your testimony, I hope you can submit your answers within a week (by October 17, 1988) so that the hearing record may be printed as soon as possible.

Thank you for your cooperation.

Sincerely,



TOM HARKIN
Chairman
Subcommittee on Nutrition
and Investigations

QUESTIONS SUBMITTED BY SENATOR HARKIN FOR WILSON SCALING

1. In your testimony you stated that six or seven states were not complying with the guidelines relating to conservation systems published in the Federal Register of June 29, 1987. Please provide a list of those states.
2. In your testimony you stated that the following language published in the Federal Register on June 29, 1987 remained valid: "These revisions will have the effect of eliminating a rigid 'T' standard for soil and crop situations where is it [sic] not economically or technically feasible or practical to achieve 'T'."

In light of your testimony, may local conservation districts and Soil Conservation Service district conservationists require that conservation compliance plans reduce soil erosion to the soil loss tolerance ("T") level for soil and crop situations where it is economically and technically feasible and practical to achieve "T"?

3. Will the Soil Conservation Service review and evaluate the rates of soil erosion expected to occur under Alternative Conservation Systems approved for use in conservation compliance plans?
 - a. Please describe the methods used to conduct such reviews and evaluations.
 - b. Are such reviews being conducted at this time?
 - c. When will these reviews and evaluations of Alternative Conservation Systems be completed?

Responses to Questions Submitted to Wilson Scaling
by Senator Harkin

Question 1:

In your testimony you stated that six or seven states were not complying with the guidelines relating to conservation systems published in the Federal Register of June 29, 1987. Please provide a list of these states.

Answer:

As of May 1988, the states that had not implemented alternative conservation systems in the field office technical guides for all or parts of the state were: Wisconsin, Michigan, Wyoming, Ohio, Iowa, Indiana, Kansas, and Nebraska.

Question 2:

In your testimony you stated that the following language published in the Federal Register on June 29, 1987 remained valid. These revision will have the effect of eliminating a rigid "T" standard for soil and crop situation where is it (sic) not economically or technically feasible or practical to achieve "T". In light of your testimony, may local conservation districts and Soil Conservation Service district conservationists require that conservation compliance plans reduce soil erosion to the soil law tolerance ("T") level for soil and crop situation where it is technically feasible and practical to achieve "T"?

Answer:

No, because the field office technical guide contains both the basic conservation systems which are designed to achieve "T" values, and the alternative conservation systems which we designed to achieve substantial reductions in erosion. Under the rules for the Food Security Act of 1985, a producer can not be required to implement the basic conservation system.

Question 3:

Will the Soil Conservation Service review and evaluate the rates of soil erosion expected to occur under Alternative Conservation Systems approved for use in conservation compliance plans?

Answer:

Yes, we are reviewing the alternative conservation systems that are approved for use in conservation compliance plans. As noted in my testimony, in order to address the concern that in some areas the alternative systems would not reduce erosion to reasonable levels, I sent a letter to all state conservationists instructing them to review the field office technical guides in their state and modify any systems that either require an unreasonable level of erosion reduction or do not achieve an appropriate level of erosion reduction in a reasonable and practical manner. I am enclosing a copy of that letter for information.

Question 3(a)

Please describe the methods used to conduct such reviews and evaluations.

Answer:

The state conservationists were asked to make the review through their normal oversight and appraisal of field office operations. We did not give specific instructions for conducting the review.

Question 3(b):

Are such reviews being conducted at this time?

Answer:

My letter referred to above was delivered to all state conservationists on September 27, 1988. I assume that the reviews are underway.

Question 3(c):

When will these reviews and evaluations of Alternative Conservation System be completed?

Answer:

I do not know at this time when the reviews will be completed. I am confident that the state conservationists will approach this task in an expeditious manner.



Questions Submitted to Wilson Scaling
by Senator Conrad

Question 1:

For Conservation Compliance, what is the status of completing the conservation plan that will be needed? Please break the information down by states if you have that information.

Answer:

A table giving the breakdown of planning accomplishments for conservation compliance is enclosed. The data are provided by states.

Question 2:

Would you identify any potential areas of major controversy that you might anticipate as implementation of the conservation title continues.

Answer:

I believe that most of the major areas of potential controversy have been identified. As you know, one of the major areas of controversy has centered around the Swampbuster provision relating to its applicability on previously converted land and the extent of the penalty. With Sodbuster, the controversy centering on plowing alfalfa has pretty well died down and I don't really expect any additional major controversial areas relating to Sodbuster. However, as you know, the prices of agricultural commodities have increased this year and there could well be a new push to put additional land into cultivation if prices continue to increase. If this happens, obviously there will be increased controversy with both Sodbuster and Swampbuster.

FSA PROGRESS SUMMARY AS OF OCTOBER 1, 1988

STATE	HIGHLY ERODIBLE LAND (Acres)	HEL ACREAGE	
		DETERMINATIONS COMPLETED (%)	HEL ACRES PLANNED (%)
Alabama	1,741,073	93	70
Alaska	49,584	100	94
Arizona	988,424	100	73
Arkansas	512,160	99	53
California	1,858,996	64	32
Colorado	9,150,000	88	60
Connecticut	13,496	100	74
Delaware	10,423	100	74
Florida	221,947	74	54
Georgia	1,083,784	100	52
Hawaii	62,926	100	37
Idaho	3,537,500	78	50
Illinois	4,900,000	88	57
Indiana	2,687,829	100	48
Iowa	12,102,300	89	56
Kansas	12,962,291	100	68
Kentucky	4,200,000	74	39
Louisiana	230,000	78	43
Maine	150,000	73	54
Maryland	299,777	100	77
Massachusetts	16,452	93	70
Michigan	626,000	86	57
Minnesota	2,100,000	93	48
Mississippi	1,610,043	95	45
Missouri	5,959,774	98	39
Montana	13,700,000	57	51
Nebraska	9,709,152	87	53
Nevada	105,548	80	70
New Hampshire	5,952	100	72
New Jersey	70,687	100	62
New Mexico	1,400,000	90	53
New York	1,020,000	88	63
North Carolina	1,202,400	81	49
North Dakota	6,705,384	65	32
Ohio	1,709,662	100	58
Oklahoma	4,712,495	100	43
Oregon	1,927,000	93	43
Pennsylvania	1,581,963	100	59
Puerto Rico	4,000	56	31
Rhode Island	236	100	53
South Carolina	417,360	75	52
South Dakota	3,949,384	100	53
Tennessee	2,513,100	74	51
Texas	15,586,182	70	50
Utah	564,000	85	72
Vermont	70,602	100	62
Virginia	987,567	100	56
Washington	3,500,000	99	54
West Virginia	66,293	100	75
Wisconsin	3,292,288	72	39
Wyoming	804,500	90	70
TOTAL	142,680,534	84	53

ANSWERS PROVIDED BY WILSON SCALING TO QUESTIONS ASKED AT SENATE AGRICULTURE
COMMITTEE HEARING OCT. 4, 1988:

TRANSCRIPT

Page# Lines

38 23-25 Q: ---how far along we are in the (wetland) mapping?

39 1

A: We have been doing the HEL determinations first. Of 2.4 million farms that will have wetland determinations made, we have made 112,000 positive determinations at this time. So we have done about 5% so far.

Q: Is mapping completed now?

A: No

Q: Can somebody go to their local office and find out exactly what has been determined to be a wetland?

A: In areas where mapping is completed, yes. In other areas someone will be sent out to make a determination if the situation warrants it.

39 11-13 Q: Are we not in a situation in which farmers can be held in violation even though they may not know?

A: Yes. But the way the law is framed, it is the farmer's responsibility to notify ASCS if he intends to manipulate a wetland. And when he goes to the ASCS office to sign up for program benefits he is asked if he intends to manipulate a wetland.

39 19-21 Q: Maybe you could supply for the record the schedule for completing wetland determinations.

A: As I stated, we have been making HEL determinations first so the availability of resources has prevented our completing wetland determinations as yet. Our goal is to complete all ^{wetland} determinations on croplands for farmers who are participating in programs by Dec. 31, 1991.

Page # Lines

- 39 23-25 Q: Please submit....what recommendations you would make to a farmer....
40 1-2 expected to be complying with the law but he may not, as of yet, know what determination has been made.
- A: When signing up for program benefits, he is asked if he intends to manipulate a wetland. If he answers yes or is not sure if he has a wetland, someone is sent to make a determination on his field. My recommendation would be to contact his ASCS office right away.
- 44 2-5 Q: What percentage of farmers who are covered under this (compliance) would currently have a plan?
- A: 54%
- Q: What percentage are left to go?
- A: 46%
- Q: What kind of progress is being made?
- A: We expect to accomplish 65% by the end of the calendar year 1988 and we are on track with those completions.
- 44 14-18 Q: Can you give us...the completion rate?
- A: By the Dec. 31, 1989 we will have completed all plans we have had requests to do.
- Q: ...and what you anticipate it will be by the end of next year.
- A: All states will be completed by the end of 1989.
- 45 4-10 Q: On sodbuster...analysis of major controversies that we might face....
- A: As I stated earlier, we don't expect any additional major controversial areas relating to sodbuster.
- 47 23-25 Q: Are T values scientifically based or are they just arbitrary?
- A: I will provide an article that was in the Journal of Soil & Water Conservation about a year ago for you. (following)



The concept of soil loss tolerance—T value—rests upon assumptions that some soil scientists feel must be challenged

Soil loss tolerance: Fact or myth?

By Leonard C. Johnson

THE concept of tolerable soil loss, as now applied in soil conservation programs, does not serve the long-term interest of mankind in assuring the indefinite productive capability of cropland. Why? Because soil loss tolerances—T values—presently assigned to cropland soils are based on faulty premises concerning rates of topsoil development and mineral weathering processes.

The concept of soil loss tolerance rests upon two assumptions: first, that soil scientists can assess reliably and objectively the maximum rates of soil erosion that can be tolerated and, second, that policymakers can objectively weigh that assessment against

countervailing interests or needs, however these may be defined. Both assumptions should be challenged.

Short-term political considerations may demand that public policy allow soil resources to degrade, gradually but unceasingly, to a state of agricultural uselessness. But continued support of such a policy must clearly acknowledge the extent and quality of known information about soil development rates under agricultural conditions. Soil loss tolerance values are too important to continue to be based on what amounts to quasi-scientific folklore.

The T-value concept

The intense nationwide soil conservation movement, initiated in the United States in the 1930s, included a strong quest for practical knowledge about why and how soil

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erodes and about practices and techniques for preventing or controlling soil erosion. Many governmental agencies and other institutions implemented a massive effort to seek knowledge from various sources. Their goal was to develop a sound foundation in science and technology for the vital work of soil conservation.

Through numerous, comprehensive research and development studies, it increasingly became possible to describe soil erosion and its control more or less accurately and quantitatively. Professional soil conservationists realized that a quantitative standard was needed to evaluate the effectiveness of erosion control measures. This standard is commonly known as the "tolerable soil loss rate" or "T value," usually expressed in tons per acre per year or equivalent dimensions.

Dwight Smith was probably the first student of soil erosion and erosion control to express the need for such a quantitative erosion control standard and to give intellectual substance to the concept of permissible soil loss (30). He stated that the maximum allowable rate of soil loss should be "that rate which will permit at least a constant or preferably an increasing time gradient of soil fertility." Focusing his concern on soil fertility maintenance as the critical determinant of soil loss tolerance, Smith tacitly recognized that allowable soil loss rates could vary depending upon the economic feasibility of treating the soil with fertilizer to replace mineral nutrients lost through erosion.

However, he also expressed a concern for the threat posed by mass wastage, stating, "Four tons soil loss per year may be too great for maintenance of soil fertility... when erosion has progressed to the point that plowing is diluting the surface soil with thin layers of subsoil."

O. E. Hayes and N. Clark also concluded that a practical limit should be placed on soil erosion rates (12). They suggested that farmers would regard an annual soil loss rate of 3 tons per acre per year on Fayette silt loam as reasonable. Citing geologists' estimates, they stated that to produce a foot of residual soil material from limestone would require the decay of at least 100 feet of rock and thousands of years. The researchers concluded that even at the rate of 3 tons per acre per year, soil losses would greatly exceed the production of soil material by natural weathering processes.

In further developing the concept of allowable soil loss, Smith and D. M. Whitt said, "The ultimate objective of soil conservation is to maintain soil fertility and hence crop production, indefinitely. Any soil loss that permits a decline in fertility must be

avoided" (31). They believed soil organic matter content was the critical determinant or indicator of soil fertility, and assigned maximum permissible soil loss rates to selected Missouri soils using graphic plots of yearly changes in organic matter content against annual soil loss rates.

Permissible soil loss featured prominently in the deliberations of a 1956 conference of the Agricultural Research Service, the Soil Conservation Service, and certain university faculty members (35). At this conference a committee recommended that "...in no case should a permissible soil loss of more than 5 tons per acre per year be allowed." This recommendation was based in part on a \$2 average value of nitrogen and phosphorus nutrients in a ton of soil and the subjective belief that "plant nutrient losses of more than \$10.00 per acre per year may be excessive for any farmer." The committee also recognized that soil loss tolerance values should be based on considerations more fundamental than the cost of fertilizer materials and the shifting profitability of crop production. Therefore, they set forth the following items "of prime importance in considering permissible soil loss rates:"

- ▶ Maintenance of soil depth adequate for crop production.

- ▶ Value of mineral nutrients lost.

- ▶ Maintenance of the capacity and effectiveness of water control structures and control of floodplain sedimentation.

- ▶ Prevention of gully development.

- ▶ Crop yield reduction, per inch of topsoil loss.

- ▶ Water losses as surface runoff.

- ▶ Seedling losses.

The proceedings of a later SCS workshop (2) reformed these seven items into three general criteria or broad objectives for establishing T values:

- ▶ Soil loss should be reduced to a level that will maintain an adequate soil depth favorable for crop and timber production over a long period of time.

- ▶ Soil losses should be lower than those causing severe gullying in fields or serious siltation in waterways, terrace channels, drainage ditches, and road ditches.

- ▶ Plant nutrient losses should not be excessive.

Others have defined the T value at least partially in economic terms; that is, with reference to the monetary costs of ameliorating productivity declines associated with soil erosion. The initial attempt in 1956 to broadly define permissible soil loss (35) took into account the costs of replacing the mineral nutrients lost through soil erosion. Smith and Walter Wischmeier wrote, "Both physical and economic factors are considered in establishing soil loss tolerance

values. The concept is to limit soil loss to levels that will allow economical maintenance of soil productivity" (32). This view was also expressed in *Agriculture Handbook No. 537*: "The term 'soil loss tolerance' denotes the maximum level of soil erosion that will permit a high level of crop productivity to be sustained economically and indefinitely" (39).

The agricultural productivity of soil is a function of relationships between the soil itself, in all of its manifold physical, chemical, and biological aspects, and the life processes of plants. Degradation of cropland soils occurs principally through two general mechanisms: loss of soil material through erosion and qualitative degradation of edaphic properties through tillage-induced wastage of organic matter and alteration of desirable physical features. Some soils never possessed, or have lost through misuse or mismanagement, the capacity to sustain "a high level of crop productivity," however that property may be defined. The costs of goods and services may influence substantially decisions on whether and how to control erosion or counter its adverse effects on crop production. Conditioning soil loss tolerance on present-day costs of mineral fertilizers, for example, implies little appreciation for the importance of guarding the vital edaphic qualities of healthy topsoil against mass wastage or tillage-induced organic matter oxidation. It does not allow for our lack of knowledge about future costs of fertilizers and other remedial measures.

In practice, the soil loss tolerance concept appears to be focused on preserving agricultural productivity of soils in situ. Preventing excessive reduction in topsoil depth has become the predominant operational criterion of erosion control practice effectiveness, with consideration of total soil profile depth where this seems to be, potentially at least, a secondary productivity-limiting soil factor. A 1977 SCS technical advisory (37) cited soil profile depth as the nearly exclusive determinant for selecting T values. Tolerance values were adjusted downward by one ton per acre per year for soils already severely eroded, reflecting consideration of topsoil depth as a secondary determinant.

Additional refinements of the soil loss tolerance concept took place in the 1950s, and tolerance values were assigned to various soils. Donald McCormick and his colleagues, in reviewing that work, concluded that "current T values were based largely on considerations of the rate of formation of A horizons, with adjustments based on the thickness or other aspects of the quality of the entire soil depth accessible to plant roots" (22).

Thus, T values have evolved largely

through short-term economic considerations of declining agricultural productivity due to excessive soil erosion. Key elements in attempts to relate soil losses to diminished productivity have been topsoil depth and available mineral nutrient levels.

Soil formation rates

In recent years concerns about rates of soil formation have re-emerged, especially in relation to prevalent soil erosion rates under intensive agricultural use. Writers have cited various supposed sources of information on rates of soil formation, with a proliferating array of secondary and tertiary sources being cited as though they were primary sources.

It appears that many published references on soil formation rates can be traced to two sources: A speculative guess by geologist T. C. Chamberlin and certain speculative deductions by Hugh Hammond Bennett. These two scientists, separated by a generation in time but both addressing deep and widespread concerns about the threat of rampant soil erosion, attempted to cast some light on the vitally important question of soil formation rates.

Chamberlin, then head of the University of Chicago Department of Geology, expressed his concerns at the 1906 White

House Conference on Conservation of Natural Resources. He said, "We have as yet no accurate measure of the rate of soil production. We merely know that it is very slow.... Without any pretension to a close estimate, I should be unwilling to name a mean rate of soil formation greater than one foot in 10,000 years on the basis of observation since the glacial period. I suspect that if we could positively determine the time taken in the formation of the 4 feet of soil next to the rock over our average domain, where such depth obtains, it would be found above rather than below 40,000 years. Under such an estimate, to preserve a good working depth, surface wastage should not exceed some such rate as 1 inch in a thousand years" (6).

Bennett discussed the results of a series of short-term studies (about five years) of erosion rates from small field plots on various soil types at several locations throughout the United States. He observed that under well-established, mature forest or grass cover the land surface appeared to be effectively protected from erosional forces and probably had been stabilized for a very long time (3). Based on these empirical studies and observations, Bennett speculatively concluded, "At such a slow rate of planation [0.002 ton per acre year in the case of Cecil sandy clay loam under forest cover] soil probably re-

builds from beneath fast enough to balance surface removal" (3). He further stated, "These losses are so small [0.002 ton per acre per year under forest cover; 0.012 under grass] that soil probably builds from beneath as rapidly as it is removed from the surface."

In an introductory chapter of his extensive treatise on soil conservation, Bennett (3) presented a general overview of his beliefs about rates of soil formation:

"Soil is reproduced from its parent material so slowly that we may as well accept as a fact that, once the surface layer is washed off, the land so affected is, from the practical standpoint, generally in a condition of permanent impoverishment. As nearly as can be ascertained, it takes nature, under the most favorable conditions, including a good cover of trees, grass, or other protective vegetation, anywhere from 300 to 1,000 years or more to build a single inch of topsoil. When 7 inches of topsoil is allowed to wash away, therefore, at least 2,000 to 7,000 years of nature's work goes to waste. The time involved may be much longer; the building of the second inch may require many more years than the building of the first inch at the surface, and so on downward."

Hugh Bennett (right) and Kendall Weisiger, Southern Bell Telephone and Telegraph Co., observe erosion on an abandoned South Carolina farm in the early 1940s.



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Bennett repeated this statement with only minor variations in both the 1947 and 1955 editions of a less technical, more popular-styled book (4). This represents the extent of Bennett's allusions to rates of topsoil formation, and he cited no research results or other primary sources of data to substantiate his conclusion.

Today, after several decades marked by continuing, severe cropland erosion, the vital question of how rapidly soils may form from various parent materials is being raised again in various quarters. Unfortunately, the torch of scientific knowledge still sheds only a dim and flickering light on this question.

David Pimentel and associates, citing Norman Hudson (13) as their source, wrote, "Under ideal soil management conditions, soil may be formed at a rate of 1 inch (2.54 cm) in about 30 years" (26). Citing Bennett (3), A. F. Gustafson (9), and Oliver Owen (25) (misrepresented as O. Olivers), Pimentel and his colleagues further stated, "... and under natural conditions at a rate of 1 inch in 300 to 1,000 years" (26).

Later, Dave Schertz, citing Pimentel and associates, stated, "Several scientists have suggested that under natural conditions soil forms at a rate of 1 inch in 300 to 1,000 years" (27). S. A. Schunim and M. D. Harvey (29) also cited Pimentel and associates as authorities who "... consider that under ideal soil management conditions 25 mm of soil can form in 30 years (0.8 mm yr⁻¹) and "under normal agricultural practice, 25 mm of soil can form in 100 years (0.25 mm yr⁻¹).

Examination of these citations reveals that Hudson (13) apparently cited Bennett (3) as the basis for his statement: "The rate of formation cannot be precisely measured, but the best estimate of soil scientists is that under undisturbed conditions it will take on the order of 300 years to produce 25 mm of top soil...." In a second edition of his book, Hudson repeated the statement and also made the puzzling assertion that topsoil formation can be hastened ten-fold by tillage-induced aeration and leaching (14). In this later edition, moreover, Hudson completed the circle by citing Pimentel and associates instead of Bennett as the source of undergirding data. But, as noted above, Pimentel and colleagues cited Bennett, Gustafson, and Owen, in addition to Hudson.

Pursuing this trail a bit further shows that Gustafson, in his brief treatment of this important question (9), simply quoted and subscribed to Chamberlin's conclusion that "the formation of soil is an extremely slow process...." The contribution of Owen (25) to the body of knowledge about the rate of soil formation is a nonspecific citation of certain authorities (presumably Bennett (3),

Jenny (15), and Kellogg (17), listed in a bibliography at the end of his third chapter, "Nature of Soils").

Contrary to the interpretations of some writers, Bennett did not adduce from his observations an affirmative finding of rates of topsoil development. Rather, he suggested it seemed reasonable to assume that subsoil material was being produced by bedrock weathering as rapidly as surface soil was being removed by erosion under a very stable condition of long-standing, complete vegetative protection. Bennett's opinions in this matter do not provide any basis for the five-ton-per-acre-per-year maximum soil loss tolerance now firmly fixed in erosion control programs and policies. Somehow, his tentative assessments of probable rates of development of soil materials from parent material have become transmuted into positive suggestions, if not assertions, that topsoil is being or can be formed at certain rates on cultivated cropland.

Soil development processes

To speak of topsoil formation without further rational analysis is to imply that a process of net gain occurs. Actually, topsoil develops through transformation of subsoil into topsoil, a process characterized by a net loss of mineral matter through dissolution and leaching and, under minimal physical disruption (no tillage), by either a net gain or no discernible change in organic matter content. The overall result of this process, however, is a net loss of mass from the soil profile.

Charles Kellogg (16), in a seminal work on soil development, portrayed this phenomenon as resulting from both "destructural" and "constructional" processes. He described the unconsolidated mineral material, produced from rock by "destructural" and "essentially sterile" chemical and physical weathering processes, as the parent material from which soils form. Kellogg considered the introduction of organic material as the progenitor of the constructional phases of soil development: essentially the process of topsoil formation and the additional chemical and physical processes and reactions are associated with the "biological constructional forces in soil development" (16). However, considering the quantities of mineral materials retained in situ, both topsoil and subsoil formation can be viewed as destructive because of the additional dissolution of soil minerals through biochemical reactions occurring in topsoil and the subsequent loss of those minerals through leaching.

Noting that "numerous reviews have been made of reports on the rate of rock weather-

ing," Donald McCormack and associates (22) found that "data on the rate of development of a favorable root zone from weathering of parent material are not yet conclusive." They considered a renewal rate of one-half ton per acre per year to be "a useful average for unconsolidated materials.... For most consolidated (rock) materials, rates are much lower" (22). (Actually, this is a residual soil material accumulation rate, rather than a renewal rate.) In their analysis of criteria for determining soil loss tolerance values, McCormack and his colleagues noted that "the rate of soil formation simply will not compensate" for soil erosion at the rate of currently accepted T values. They concluded, "Political expediency and short-sighted environmental or economic demands cannot be allowed to determine tolerable levels of soil erosion" (22).

Scientists generally consider the accumulation of organic matter at the surface the initial step in topsoil development on mineral soil profiles. G. F. Hall and associates (10) reviewed the results of several studies on organic matter accumulation in soil materials under both forest and grass vegetation: "All these studies suggest that organic matter can accumulate very rapidly under either forest or grass vegetation. Accumulations that can qualify as an A or A1 horizon take place in a matter of 10s of years, and a steady state between gains and losses can be reached in a few hundred years" (10).

Such a suggestion about unquantified rates of organic matter accumulation under undisturbed vegetative cover can hardly provide a basis for Schertz's conclusion that "...formation of the A horizon exceeds 1 inch in 30 years" (27). Nor can it be a basis for any conclusions about rates of topsoil development under annual or rotational cropping systems.

Terry Logan (20) emphasized two points relative to rates of topsoil renewal: rates of rock weathering are not necessarily similar to rates of topsoil renewal, and whatever the rates of soil renewal are, they are probably lower than present T values. Observing that "most estimates of soil renewal are 0.5 metric ton/ha/year (<0.2 ton/acre/year)" Logan concluded, "We are in essence mining the soil in order to produce food and fiber in the same way that we mine our coal resources" (20).

Using land for intensive, annual grain crop production results in a gradual and persistent decline in soil organic matter content. Given the relationship of oxygen supply and temperature to microbial activity and the decomposition of organic materials and the relationship of tillage to soil aeration and soil warming, such a result is virtually inevitable (1, 5, 8, 33, 34).

The conditions imposed on soils by intensive agricultural practices today do not permit conversion of subsoil into new topsoil through organic enrichment. There can be no progressive downward migration of the subsoil/topsoil zone of transition unless a continuing and persistent annual net gain in soil organic matter content occurs. Such downward translocation of the subsoil/topsoil boundary that may occur in cultivated soils is a consequence of a progressive lowering of the plow layer or tilled zone into the subsoil due to erosional losses and tillage. It is not due to marginal gains in organic matter content. This phenomenon also is marked, of course, by retrogressive dilution of the organic content of the tilled zone through continuing admixture of subsoil mineral matter, which usually further degrades the edaphic qualities of the vital soil zone of seed germination and seedling establishment.

Basing T values on contemporary farming profitability standards or present day costs of fertilizers cannot insure or even address the long term maintenance requirements of fully productive cropland soils. Moreover, to contend that presently assigned T values approximate natural rates of soil development is to do a grave disservice to both soil science and the ultimate goal of soil conservation.

T values versus reality

In 1909 the chief of the U.S. Bureau of Soils offered the following euphoric assessment of the condition and future of the nation's soil resources: "The soil is the one indestructible, immutable asset that the Nation possesses. It is the one resource that can not be exhausted; that can not be used up" (36). It is unlikely that any soil scientist or conservationist today would subscribe to such a sanguine view of soil indestructibility. Yet the concept of tolerable soil erosion rates, as presently defined and applied, is equally unrealistic as a basis for long-term protection and maintenance of soil resources.

In 1948 Kellogg (18) asserted, "Through proper cropping systems and soil management practices, erosion of soil under use should be kept somewhere near the normal rate." He defined the normal rate of soil erosion as the rate that would occur without land surface disturbance by agricultural practices.

A similar view, expressed in a report prepared by the Wisconsin Chapter of the Soil Conservation Society of America, stated in part: "Until now, practical and political considerations by the policymakers and program administrators have allowed for the ac-



Soil conservation efforts must be directed at protection of the entire plant rooting zone in the soil profile, not just the surface soil layer.

ceptance of 'tolerable' average soil erosion rates of up to 5 tons per acre per year.... Even the lowest T value, it should be noted, is many times greater than the rate at which the soil is forming under completely natural conditions. Soil erosion control goals based on T values therefore should be considered as provisional or short-range. Such standards grant license to...waste' the soil resource to a depth of 5 or 6 inches per century. Accordingly, the long-range goal should be to reduce cropland erosion to a rate no greater than that which would occur through the action of nature alone."

Discussing the dilemma posed by the conflict between desires for short-term gain and the necessity of maintaining soil productivity indefinitely into the future and having "no conclusive evidence that a decline in production caused by soil erosion is recoverable under continued cultivation," McCormack and William Larson (21) concluded: "Ultimately, we must squarely face the fact that soil productivity is directly tied to the overall thickness of the rooting zone, which forms much more slowly than the A horizon in cultivated soils. Long-term soil conservation objectives must be consistent with this fact. There is no alternative."

J. B. Williams and associates (20), as-

¹⁸Wisconsin Chapter, SCSA, Soil Conservation Policies for the 1950's. A report of the Advisory Committee on Land Resources, July, 1952.

serted, "There is essentially no research base to support T values; they were established and are revised on the basis of collective judgments by soil scientists." Nevertheless, G. F. Hall and colleagues (11) concluded, "An upper limit (to allowable soil loss) of 11 mt/ha (about 5 tons per acre per year) is generally accepted since it approximates the maximum rate of A horizon development under optimum conditions" (emphasis added). It must be noted, however, that optimum conditions for organic matter accumulation and, hence, for topsoil development do not even come close to occurring on cultivated cropland as a general rule.

Larson (19) proposed a two-level approach to setting T values: a T_1 value reflecting on-site soil productivity maintenance objectives and a T_2 value reflecting broader social purposes and off-site concerns, such as water pollution or reservoir sedimentation. The T_1 values would be set by scientific experts in soils and agriculture; T_2 values would be set by economists, environmental scientists and planners, and public policymakers. Although Larson did not indicate how he thought T_1 and T_2 might be related quantitatively, Peter Nowak and associates (21) suggested that T_2 temporarily might be set higher than T_1 where the economic, social, or political costs of reducing current erosion rates to a crop productivity maintenance level were deemed excessive. But deciding whether or not costs are excessive is in every instance an exercise in priority setting. Such a temporary relief could easily become permanent, and the T_1/T_2 approach could become a victim of persistent reluctance to acknowledge that agronomic crops are grown on productive soils, not on the social, political, or economic constraints of the moment.

New commitment needed

The introduction to a report on a recent symposium imagined a trip to a farm in the year 2030. Among other marvelous achievements B. C. English and colleagues posited, "Tillage practices and crop-growing patterns reduce erosion to a level where natural processes of soil formation replace amounts lost to water and wind erosion" (7). Some may argue that this futuristic scenario represents an impossible dream: that the need for maximum grain production and monetary profit in the near term is so compelling that reducing soil erosion to anywhere near the "normal" rate cannot be contemplated seriously, much less achieved in the foreseeable future. But such a rationalization cannot be offered or accepted forever.

Reducing cropland and rangeland soil erosion rates virtually to zero or to the nor-

mal rate must become a firm goal of agriculturists and conservationists. The productive and environmentally sound agriculture that mankind and a great many other of earth's creatures require is not otherwise sustainable. What is needed to effect this essential goal? First, land management policies must severely restrict production of annual crops on highly erodible lands. Second, agricultural crop production systems must be developed and used that retain complete ground cover at all times while permitting all seed placement and other cultural operations with absolutely minimal disturbance of either surface vegetative cover or soil.

The first requirement is beginning to be addressed through the conservation reserve program and similar initiatives undertaken by state governments, for example, the Reserve in Minnesota reserve program. An approach to addressing the second of these urgent needs was suggested by William Moldenhauer and Charles Onstad. "As the need for reduced erosion becomes more critical, methods of control...should become more innovative" (23). Systems that presently seem infeasible, they noted, "may be developed as the pressure to control erosion increases. If mechanical controls in conjunction with residue management are too costly or not feasible on certain soils, then perhaps the only alternative is permanent meadow or pasture."

L. L. Stonaker and Moldenhauer (29) sharpened the focus on this approach in observing that "the conventional plow-disk-harrow system became preeminently successful because of the combined efforts of research and educational disciplines and industries working with farmers over many decades." They called for a similar, all-out effort to promote surface residue-retaining systems of crop culture.

McCormack and Larson (21) wrote, "Perhaps we can afford to take as long as 25 years" to acquire the knowledge needed about "rates of formation of favorable root zone in various...parent materials, about methods of tillage that will hold soil erosion to very low levels, and about restoring the productivity of severely eroded soils." Unrelenting emphasis must be focused, first and foremost, on the second of these three categories. Undoubtedly, some eroded soil profiles can be restored to a productive state if sufficient depth of suitable soil material remains. The profitability of such restorations depends upon the costs of correcting or overcoming the deficiencies in productive capacity resulting from excessive erosion. These costs will not remain constant over time, nor can their trends be predicted accurately. Costs that may seem economically justifiable today are likely to be unaccept-

able in a century when cropland soil depths will be diminished by an additional four to six inches or more.

A new order of commitment is needed. The goal of achieving soil erosion control compatible with a sustainable agriculture will require efforts driven by a zeal at least equal to that which motivated the all-out crop production programs of the past. Time is short for realizing the year 2030 scenario described earlier. The 25-year horizon posited by McCormack and Larson is even nearer. It can be done, but policies, programs, and technologies cannot achieve the needed soil protection level if the performance standard is rooted in erroneous beliefs and institutionalized deceptions concerning the process of soil development. Acquiescence in unceasing soil resource degradation is not an acceptable public policy choice.

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Senator HARKIN. Thank you very much, Mr. Scaling.

So are you saying, Mr. Scaling, that the directions you sent out in May of this year—

Mr. SCALING. The directions I sent out in May of this year, sir, were nothing more than the directions I sent out a year earlier. We had some States that were not implementing alternative conservation systems. They were still going to T. That was totally against my policy, sir.

Senator HARKIN. But I understand, though, in June of 1987, that T standard was eliminated?

Mr. SCALING. Yes, sir.

Senator HARKIN. Where it was determined not to be economically feasible or practical to achieve T?

Mr. SCALING. Yes.

Senator HARKIN. But the directive this year says that every farmer, regardless of economics or anything, can go—

Mr. SCALING. It was a policy that came out in June, after the final rules were implemented on all the rest of the farm bill work except compliance and sodbuster. We held those open for another 90 days to get comments, because we were going to be flexible.

Sodbuster is still held to T. A rigid T standard is still held for sodbuster, for plowing up of virgin lands or woodlands. But on compliance, where you are already farming, where you already have land in cultivation, we do have these alternative systems in our field office tech guides. We still had some States that had not implemented the alternative systems.

That memo I sent out in May was to put everybody on notice that all States, all field office tech guides, if they have highly erodible soils, will have alternative conservation systems in them.

Senator HARKIN. If it is not economically feasible or practical. Did you add that?

Mr. SCALING. No, I did not add that, sir.

Senator HARKIN. Well, then there is a difference from a year ago. That is a definite change.

Mr. SCALING. I do not feel that it is.

Senator HARKIN. Why did you not add that, then, to make it consistent?

Mr. SCALING. It probably was just an oversight.

Senator HARKIN. Then you would revise it and put that back in?

Mr. SCALING. I imagine we probably could, but I think right now everything is—

Senator HARKIN. Again, I think maybe there is a misunderstanding here, a great misunderstanding. No one wanted to make sure that we had to reach these T levels if it was economically impractical or just totally impractical to achieve that on certain lands. That is when you could use alternative systems.

But then to come in later on and say that every State has to have an alternative conservation plan, without saying anything further, that every farmer has to be given that opportunity, then you do away with the economic impracticality of it. That means that every farmer has to have that available, regardless of his situation.

Mr. SCALING. The United States, sir, I guess I have always been brought up to feel that you are innocent until proven guilty. I

guess I look at this the same way. I believe anybody that is farming this land, the United States, we have a lot invested in that. We have our time, we have our labor, we have our whole life invested in that. We have a lot invested in equipment. We are the ones producing food and fiber more economically than anybody else in the world.

All of a sudden we come in here and, in one year's period of time, we now have you might say quasi-mandatory rules and regulations. We have never had that before, sir. You can catch a lot more by saying please and thank you than you can by forcing people to do things against their will.

I said at the start of this, if people are farming, they are already established, then if they are farming on highly erodible land, then they will have the benefit of an alternative conservation system. We had some States that have never put alternative conservation systems in use. We still had that. I was still hearing from producers at a local level that said we are still being regimented to go to T. Where is this flexibility?

T is just not—plus or minus 25 percent is not accurate.

Senator HARKIN. Let us not get hung up on any ideologies here. You are talking about mandating farmers to do something. Again, conservation compliance has to do with whether or not you want to be in the farm program, right? If you do not want to be in the farm program, if you do not want to have any farm benefits, there is no government coming down to say you have to do this and you have to do that.

Now on the State level, you agree, I think, with me, that States do have certain rights that the Federal Government does not.

Mr. SCALING. Yes, sir.

Senator HARKIN. Now in my State of Iowa, we do have a law that has nothing to do with farm programs, that says if soil runs off your land onto somebody else's land, that person has a right of action against you. We have done that on the State level, and you might disagree with that, some do, but that is one way of handling it on the State level. Certainly, no one is proposing to do that on the Federal level.

All we said is if you want to be in the farm program, we will give you certain benefits from the Federal Government, and we want you to comply with certain conservation standards. There is no one mandating that a farmer has to do that. He still has his free will and his free choice. He does not have to go in the farm program.

I just want to get that straight. There is no government coming down saying you have to do that.

Secondly, on flexibility, I said in my opening statement and I maintained all along, since I worked on the 1985 farm bill, that we have to have flexibility out there. Not every place is the same. Different lands. Different soil conditions.

Mr. SCALING. Yes, sir.

Senator HARKIN. A lot of different things. You have to have flexibility.

These soil conservationists in these districts are professionals. They know their areas. They know the ways of handling soil losses. You heard back that perhaps there was not enough flexibility in some areas. Well, that could be addressed directly, without this

broad sweeping change that has upset the apple cart for everyone else in the country by making this huge change.

Mr. SCALING. It is not a huge change, sir. This change was supposed to have been implemented in June of 1987. It was not implemented in all States. I had to make it a level playing field for everybody all across the United States.

Senator HARKIN. I do not understand what you mean by a level playing field. We have said we want flexibility. I do not know what you mean by level playing field, but you may have different things in different parts of the country.

Mr. SCALING. In June of 1987, we were supposed to have had alternative conservation systems implemented in every field office tech guide for all highly erodible lands. That was not done in all States. It was done in most States, but not in all of them. We had to get this done in all States.

Senator HARKIN. Then why did you not just say that all States will have an ACS system?

Mr. SCALING. Monday morning quarterback, if I could do it over, I probably would have done that.

Senator HARKIN. I do not think it is too late right now. I mean, this needs to be clarified.

Mr. SCALING. I think we have everything clarified. I think, sir, we have everything clarified. As we go back in and we look at the ACS', the alternative conservation systems, if some of them are too loose, they will be tightened. If some of them are too tight, they will be loosened. But we have to leave that up to the State conservationists, our tech centers and local producers.

Senator HARKIN. Again, you can leave certain things up to them, and I am sure we will hear from some of the panelists coming up, but I am just saying that in June of 1987, USDA eliminated the T standards as a requirement for those soil and crop situations where it was determined not to be economically feasible or practical to achieve T.

In those situations, farmers would be allowed to use locally developed alternative conservation systems. That is, systems that would not reduce the erosion to T or tolerance levels. In the Federal Register of February 11, 1988, USDA estimated even with that available, 85 percent of the highly erodible cropland subject to conservation compliance would be brought within soil loss tolerance levels.

So even with that, even with the SCS rules of June 29, 1987, they said 85 percent would be brought within T levels. That only leaves 15 percent available for some kind of ACS out there.

You are shaking your head no? Who are you?

Mr. SCALING. This is Mack Gray. He is my assistant.

Senator HARKIN. I want to be corrected if I am wrong, go ahead.

Mr. GRAY. Well, sir, we made an estimate but that was not based on the fact that 85 percent of the country would be covered only by T value and 15 percent by alternative systems. We still believe that a high percentage of the land will be brought down to T value because the alternatives exist out there.

It may be 85 percent. We may have been optimistic on that. But there is no reason to believe that if a producer was willing to bring

his land down to T value, and it was reasonable and practical for him to do so, that he would always go above that.

So we still believe that a high percentage will come down to that level.

Senator HARKIN. I think perhaps a high percentage will, but I do not know if would be up anywhere near the 85 percent with this recent change. And again, you say it is not a change, but it seems to me you are saying on the one hand, a year ago, that we can have alternative systems if it is impractical or if it is not economically feasible to reach T. And a year later, you are saying alternative systems are available regardless of anything else.

It seems to me, that sends a message to every farmer out there: "I do not have to bring soil loss within T levels regardless of economic feasibility or practicality. I do not have to and I have it right from the head of the SCS right here. I do not have to bring it within T levels."

Mr. SCALING. That is one interpretation, sir. That is the way it started out and that is the way I still think we are handling the whole situation. It started out. I said up front that we will have alternative conservation systems for all highly erodible land in the United States. I still feel like that is where we are.

Senator HARKIN. An alternative system to attain what goal?

Mr. SCALING. To attain a reasonable degree of soil erosion, an acceptable erosion control. I cannot remember the exact words, sir.

Senator HARKIN. Reading from the Federal Register of June 29, 1987: "These conservation compliance systems will achieve a substantial reduction in existing erosion rates."

Mr. SCALING. Yes, sir.

Senator HARKIN. Continuing to read from the Federal Register of June 29, 1987: "These revisions will have the effect of eliminating a rigid 'T' standard for soil and crop situations where it is not economically or technically feasible or practical to achieve 'T.' These conservation compliance systems will achieve a substantial reduction in existing erosion rates."

Now you did not hear from me at the time that was published. I do not think you heard from anybody. That sounded reasonable. What we are focusing on is this year's change—what happened this year to change the focus of that.

Mr. SCALING. That only thing that happened this year, sir, was the fact that we did not have some people—we had some people in some States that were still not doing that and I had to get all States operating the same. I had some people in some States that were not doing that. They had never put those systems in place.

Senator HARKIN. And why would they not?

Mr. SCALING. I do not know.

Senator HARKIN. But then why let the other 85 percent, all the other people out there, always go to the most lenient?

Mr. SCALING. They do not necessarily do that.

Senator HARKIN. Listen, conservation methods—not in every case, but in many cases—mean either more work and more input from the farmer, either labor or capital, one of the two.

Mr. SCALING. Yes, sir.

Senator HARKIN. So if you are going to make me work harder or pay more, I always want to go to what makes me work less or pay less.

Mr. SCALING. I still think you are going to get more conservation on the ground going this way and everybody is going to be happy about it then you will ever do the other way.

Senator HARKIN. Again, that is why I am asking you why. You say there were certain States not implementing the June 1987 rules and I am asking you why were they not?

Mr. SCALING. I cannot answer that, sir.

Senator HARKIN. Did you ask them why? I mean, rather than just changing the whole ball of wax because a few people there put some pressure on you?

Mr. SCALING. Nobody put any pressure on me at all.

Senator HARKIN. You said some States were not complying.

Mr. SCALING. Yes, sir.

Senator HARKIN. How many States?

Mr. SCALING. Six to seven.

Senator HARKIN. Six to seven out of 50?

Mr. SCALING. Yes.

Senator HARKIN. And we change the whole thing for six or seven?

Mr. SCALING. We did not change the whole thing, sir. I brought those 6 or 7 into compliance with the other 43.

Senator HARKIN. The other 43, though, were achieving T levels.

Mr. SCALING. No, sir. The other 43 had alternative conservation systems in place and the farmers were working with them and we were reducing erosion substantially throughout the rest of the Nation. We still had six or seven States that had not done this, and the producers in those States were wondering where is this flexibility that we have been hearing about.

Senator HARKIN. There was flexibility.

Mr. SCALING. There was not any flexibility in the six or seven States, sir.

Senator HARKIN. Tell me more about that. You had flexibility. Farmers had to show it was technically or economically not feasible or impractical and they could have up to 2T.

Mr. GRAY. Or higher. They could go to the ACS.

Senator HARKIN. Then they could go to the ACS, which is higher. So what is wrong with that kind of flexibility?

Mr. SCALING. They did not have it in there. They had not put alternative conservation systems in their local field office tech guides for highly erodible soils.

Senator HARKIN. Well, I seem to be at a loss to understand why you could not have addressed that directly, rather than coming out with this new directive.

Mr. SCALING. There is no new—this is simply nothing but an update of the older directive. I had six or seven States that had never put those in their field office tech guides.

Senator HARKIN. Then if it is just an update of the old directive, then what makes you think these six or seven are now going to have it?

Mr. SCALING. Because they were put on notice that this will be done in all field offices throughout the entire Nation.

Senator HARKIN. Why did you not put them on notice that last year's directive would be implemented in each field office?

Mr. SCALING. Because it seemed like the easier way to do it this way.

Senator HARKIN. Easier? Not necessarily the most conservation minded?

Mr. SCALING. Look, everybody reads and interprets different things. To me that directive I sent out in May was pretty specific. It stated plain and simple enough, if you have highly erodible soils in a field office, you will have an alternative conservation system in that field office technical guide. I do not think anybody could misinterpret that.

Senator HARKIN. I am not misinterpreting it. I do not think I am misinterpreting it. I am interpreting it as being quite a change from last year.

Mr. SCALING. No, sir.

Senator HARKIN. So you are saying that the economic hardship and impracticality standards are still valid?

Mr. SCALING. Yes, sir.

Senator HARKIN. In those States?

Mr. SCALING. Yes, sir.

Senator HARKIN. They have to show, in order to get an ACS, the farmer has to show that it is impractical or that it is economically unfeasible?

Mr. SCALING. No.

Senator HARKIN. No?

Mr. SCALING. The farmer is given a choice now between a resource management system, which is the whole farm, everything he owns is to come in under a system, a basic conservation system which will get down to the T, or an alternative system that will substantially reduce erosion down to an acceptable level when he goes in to get a plan.

Senator HARKIN. All right. Let us say I am in one of those six States. I am a farmer. I come in the local SCS office to get my plan ready here, and the local SCS professional says we have looked at your land and here are some things that we think you could do. Here are some different options, you might want to pick.

We believe you could get your soil loss down to maybe a little over 2T or something like that. Here are some options that might be available to you. The farmer says I do not want to do any of that. Here is what I want to do. Here is what I want to do and I believe it will reduce soil loss.

Mr. SCALING. It will. We have not given up any technical—

Senator HARKIN. No, the farmer comes in and says that.

Mr. GRAY. He cannot do that. He has got to select off those options we have in the tech guide.

Senator HARKIN. Can the farmer do that?

Mr. SCALING. The farmer has to select off whatever options we offer him. Is that what you said?

Senator HARKIN. Whatever options are offered, that is all the farmer can pick from, is the options?

Mr. SCALING. Is the options that we offer him, or if he has a system on his land that reduces erosion substantially equal to whatever we offer him, we will accept that, too. Most farmers are

very innovative. They have to be if they are going to stay in the farming business.

I also feel that most farmers have a conservation ethic and they want to maintain this resource base, this natural resource that they have there.

Senator HARKIN. Most farmers do have a conservation ethic, but there is a percentage that do not.

Mr. SCALING. That is right.

Senator HARKIN. As I said in my opening statement, you will get most of the farmers in that will do this, and they will be more than willing. But when you get down to that final end, those are the ones that do not want to comply. They are the ones that are going to yell the loudest.

Mr. SCALING. This keeps the final end at 5 percent instead of 25 percent, is what I am after. I want to reduce erosion probably a whole lot worse than you do because, as I say, that is all I have ever done all my life and when I leave here, that is what I will go back to. I want to reduce erosion because I make my living doing that.

But let us do it where everybody agrees why we are doing it, and let us let the farmer come in and understand that it is his option because this is the farmer's plan. If the farmer likes this plan, it is going to be up to the farmer to make it work wonderfully, or to let it fail miserably. And if we have a group of farmers throughout the United States, that are satisfied with what a Federal agency is doing, then SCS can retain its credibility with the farm section because we are consultants to agriculture, that is what the Soil Conservation Service is.

If we have credibility in this and show that we have common sense, and we are going to work with the farming population, the people that have never worked with us, I think this is going to go a long way as we keep on going down the line, on into future years, because if we can maintain our credibility here, we are going to have a lot of credibility when we move into water quality and quantity.

You have to have a good name, sir, for people to trust you and respect you. If you have that, then people will listen to you and they will go ahead and do what you want to—you have to sell conservation. You have to sell something because you are asking people to change their management. You are asking them to change what their daddy did and their granddaddy did. And you are asking them to change something.

But you have got to have a good reason. If they buy this good reason, then they are going to change. They are going to be happy they changed. If I can get the people into the Soil Conservation Service office and I have my credibility right now, and I want to retain it. Then I tell them look, what we are asking you to do is reduce erosion substantially. We have these three systems here and you can pick from one of them.

And you get somebody to try conservation that has never tried it. And if they do it for 2 or 3 years, they are going to see that it pays. So then they are going to come back in and they are going to say, you know, that works. What else can I do to do this? You can sell them another one.

What I am doing on these alternative conservation systems, sir, is nothing more than the old progressive planning the Soil Conservation Service has done for 50 years. The goal was always to go to T. You never quite got there because the last 4 or 5 tons of erosion that you were reducing got beastly expensive. So most farmers just never did do that.

They would go so far and then they would not go any farther. I am trying to sell something because the first 40 or 50 tons of erosion is cheap. I mean, all you have to do is change your management system and you can do that. The last 4 or 5 tons is the most expensive.

To me it makes no sense in the world to spend \$50 an acre and reduce 50 tons of erosion, and then spend \$500 an acre and reduce 3 or 4 tons of erosion. Especially when T is not defensible plus or minus 25 percent.

I am trying to sell a program. I am trying to sell something. I am trying to keep everybody in the boat with me. But most of all, I am trying to keep a palatable taste in the mouths of the farmers who are having to do this.

Senator HARKIN. I do not find much to argue with in what you just said, or to disagree with, but for a couple of observations. One, the first thing that destroys credibility, I believe, around this place and in the Department of Agriculture, the first thing that destroys credibility is inconsistency.

The Government is telling farmers out there, one plan one year, one program, then a shift to something else. It is like hitting a moving target. So when someone in the Government comes out and says here is what we are going to do, farmers say that is what you say now. Let us see what you say next month. The Government said we are going to have a CRP Program, put in your bid. So farmers bid land in and 2 months later, the Government says guess what, if you did not get in on that bid, we are going to give you a bonus.

Mr. SCALING. The CRP is not mine.

Senator HARKIN. I am just talking about the whole panoply of things that farmers get hit with out there.

So now here comes SCS. Congress put conservation compliance in the 1985 farm bill. It rolls along for a couple of years. Farmers are getting educated about it, what is expected of them in the future. Nothing is required overnight. They have until 1995 to complete their plans, 10 years down the road.

We allowed flexibility in conservation compliance. We promoted flexibility. But we wanted to make sure that that flexibility was within certain parameters. Obviously, if it is totally flexible, no one will do anything. At least those that have the worst erosion will not do anything. So you have the flexibility within certain parameters.

We try to be consistent in these programs. I have to tell you—and not just from Iowa; I have heard from other places—the soil conservationist is out in the field saying, we worked hard. We have developed these plans. And now, all of a sudden, we get hit with this. And we are told that what we developed, we cannot go along with it anymore. We have to offer the farmers something else.

So farmers who came in with a plan and maybe even already have it approved by their SCS office, are now—and those usually tend to be some of the smartest ones, who got in there first and got it done—they say well, now wait a minute. Things have changed here. Erosion does not have to be reduced to T even though it would be economically and technically feasible and practical to do so. Maybe I will go back and get that plan changed now. Maybe I do not have to get it down to T levels any longer because there is nothing in the policy that refers to economic or technical feasibility or practicality, just however I can negotiate it out with that local SCS office.

That is what I believe to be the inconsistency that destroys the credibility in this program. I am really concerned that what may happen with this is that people are just going to start getting very skittish about it and they are not going to be trying to reach that T level that we tried to achieve.

Mr. SCALING. Mr. Harkin, the inconsistency was not out of Washington, was not out of my office. The inconsistency was in that six or seven States that never implemented what was coming out of Washington as opposed to the 43 States that did implement it. That is where the inconsistency is, not out of here, but out of there.

As I said a while ago, I am going 50 percent of the way to meet agriculture, but I certainly expect and demand that agriculture come the other 50 percent and meet me. I am not letting them get away scot-free at all. As I said, I believe very strongly in conservation.

For whatever it is worth, I have never done anything cost share on my country, either, and I probably never will. I do not really believe in that either, or subsidies or anything, but that is another story.

I am demanding that agriculture come halfway and meet me. I am demanding that they change their management style if they have excessive erosion. But I am not going to argue over 2 to 3 or 4 tons of soil loss erosion per acre per year, to get down to a figure. I have to have the flexibility in there because it has got to live and breathe. It has got to expand and contract just like you have between winter and summer.

Agriculture is just like humans. It lives and breathes from the time of conception until it is harvested. These plans have also got to be flexible. They have to be able to live and breathe and contract and expand.

Senator HARKIN. Did you say six or seven States?

Mr. SCALING. Yes, sir.

Senator HARKIN. What are those States? Do you know who they were?

Mr. SCALING. I will supply that for the record, sir.

[See response on page 43.]

Senator HARKIN. I would appreciate that.

Why did you not use the Federal Register rulemaking method, since previous rules had been issued in this way?

Mr. SCALING. To do what?

Senator HARKIN. To issue this new rule in May?

Mr. SCALING. Because this was an internal document. As I say, this is what all the States were doing except those.

Senator HARKIN. The 1987 rule was published in the Federal Register, and went through the publication process.

Mr. SCALING. I do not think it changed anything from what everybody else was doing.

Senator HARKIN. Here is the Federal Register of June 29, 1987. The rule is published in this issue. That way we have a chance to look it over and read it. And if we had comments, we could. I will tell you that when we read it over, my staff read it over, and when they brought it to my attention, I said it sounds all right to me.

But at least we were given some chance of commenting upon an interim rule. As I understand, the bulletin that went out this spring, May 3, 1988, did not go out through that published procedure.

I guess our difference is that you do not think the May 3 bulletin changed SCS policy, and I do.

Mr. SCALING. I do not think it changed it at all.

Senator HARKIN. You do not think it changed that a bit?

Mr. SCALING. No, sir.

Senator HARKIN. Then will you state here, before this subcommittee, that this provision published in June, 1987, that states "These revisions will have the effect of eliminating a rigid 'T' standard for soil and crop situations where it is not economically or technically feasible or practical to achieve 'T'." That still holds?

Mr. SCALING. Yes, sir.

Senator HARKIN. All right then. But you will not put that out in a notice, you will not send that out to your offices and tell them that the June 1987 rule still holds?

Mr. SCALING. You and I are still not communicating. I have done that. I have done that.

Senator HARKIN. Since May of this year?

Mr. SCALING. No. I can do that. Mr. Harkin, I can do that real simple. That is no problem on that. But to me, I have not changed anything at all from the start.

Senator HARKIN. Let me just read it to you. Here is your May 3, 1988—

Mr. SCALING. I know exactly what it says.

Senator HARKIN. I thought I could read English. Maybe there is something wrong with my ability to read. I am going to read from this May 3 bulletin.

"ACS [Alternative Conservation Systems] are to be included in all field office technical guides where there is highly erodible land subject to the compliance provisions of the 1985 Food Security Act.

"ACS are to be consistent across county and state lines where the same soil-crop situation is shared. This is a state conservationist responsibility. NTCs verify coordination among states. Once an ACS is developed, it is included in a guide sheet, labeled as applicable on FSA highly erodible cropland conservation, and filed in the FOTG as an alternative conservation system. It is then available for selection by every farmer with that soil-crop situation in that FOTG area, unless the farmer is converting native vegetation.

"No reference to 'T' should appear on the guide sheets. Use of 'T' terminology for ACS can be misleading and cause confusion. It is often misinterpreted as a minimum standard.

"Local agricultural commodity groups, ASCS county committees, conservation districts and others should be consulted in the development of ACS."

This paragraph right here, the middle one that I read from, "It is then available for selection by every farmer * * * unless the farmer is converting native vegetation." The bulletin states "ACS are to be consistent across county and state lines where the same soil-crop situation is shared. * * * Once an ACS is developed, it is included in a guide sheet, labeled as applicable on FSA highly erodible cropland conservation, and filed in the FOTG as an alternative conservation system."

No mention is made in the May 3 bulletin that Alternative Conservation Systems are available only where it is not economically or technically feasible or practical to achieve T. But you are saying that the June 1987 language is subsumed in your May language?

Mr. SCALING. Yes, sir.

Senator HARKIN. Well, I am glad to hear that. I think that was the misunderstanding.

I have no further questions. Senator Conrad.

STATEMENT OF HON. KENT CONRAD, A U.S. SENATOR FROM NORTH DAKOTA

Senator CONRAD. Mr. Chairman, if I might, I would like to go to a slightly different topic and one that we have talked about before, Wilson. Actually, we have talked about it a number of times. But I want to revisit the issue.

I want to talk about swampbuster once again and, to some extent, sodbuster as well, because these are things of great concern, mitigated somewhat by drought conditions. Obviously that has been the overriding concern, and so these other issues have been put to the back burner. But you and I both know that they are coming back some day.

Mr. SCALING. Yes, sir.

Senator CONRAD. And we had best be ready.

I wanted to take this opportunity to just visit with you about where we are on swampbuster, where we are headed on sodbuster, and what you see as the potential problems there. What are the areas of controversy that will be developing?

First, let us talk just a bit about swampbuster and if you could tell me where are we in terms of the penalty? Was there any movement there? And where are we, in terms of your agency's dealing with the whole controversy surrounding the swampbuster issue?

Mr. SCALING. Senator, right now, I really thought we were doing fairly good on swampbuster. I know we are about to put together some more inventory teams, so we can keep on identifying these wetlands. I really thought all that was fairly quiet right now.

Senator CONRAD. Of course, it is quiet because a drought pretty well takes care of any wetlands questions. I am interested to know how far along we are in the mapping? Is the mapping completed now? Can somebody go to their local office and find out exactly what has been determined to be a wetland? Are the determinations completed?

Mr. SCALING. Senator, I will just have to provide that for the record, sir.

[The answers provided by Wilson Scaling to questions asked during the hearing can be found on pages 47-48.]

Senator CONRAD. All right.

Senator HARKIN. If I can answer that, I think in my State that is true. The mapping has been completed.

Senator CONRAD. I do not think all the determinations have been made.

Mr. SCALING. This is wetland, sir.

Senator HARKIN. You may be right.

Senator CONRAD. Are we not in a situation in which farmers can be held in violation, even though they may not know?

Mr. SCALING. I will just have to supply that. I am just not sure.

Senator CONRAD. That gives rise to real concern, I think, out there. A farmer can be held in violation and he does not even know. There is no formal determination, nor has the farmer the right to appeal determinations that have been made. Maybe you could supply for the record the schedule for completing wetland determinations?

Mr. SCALING. Yes, sir.

Senator CONRAD. And also, please submit for the record what recommendation you would make to a farmer who might find himself in a catch-22 situation, where he is expected to be complying with the law but he may not, as of yet, know what determination has been made?

Mr. SCALING. I would look forward to that, sir.

Senator CONRAD. I think that would be helpful to all of us.

Mr. SCALING. I do, too.

Senator CONRAD. The second area would be on penalties. I ask you indirectly, because it is really ASCS that takes the lead on this, but I am wondering if you are aware if ASCS has made any movement on the penalties? As you know, any violation can be met with the most draconian penalty, that is the loss of all farm program benefits.

As you know, we were trying to get a different penalty provision to apply. The penalty provision that is in all other farm programs, the substantial compliance interpretation, to apply to those penalties. That is, if somebody was in substantial compliance, they would not suffer a penalty, or they would have a penalty commensurate with the crime.

Are you aware of these changes being made?

Mr. SCALING. No, I am not.

Senator CONRAD. The third element of my question relates to sodbuster, because that will be facing us soon. Sodbuster may well generate a controversy greater than what we have had under swampbuster, if that is possible.

I would be interested to know your thoughts about the areas of controversy that lie ahead with respect to the sodbuster provisions.

Mr. SCALING. I will supply that for the record, too.

I do not see a problem with sodbuster.

Senator CONRAD. You do not anticipate there will be a controversy?

Mr. SCALING. There is going to be controversy on almost anything you do, sir. That is what we have just been through right here. But I just do not anticipate any problem with sodbuster at all, because you know up front, before you do anything, what the standards that you have to meet for that.

Senator CONRAD. What I am seeking to do is identify the areas where we may have a problem. Now looking back at swampbuster, clearly we have a problem of the bill's provisions being implemented before we are really ready. That is, all the determinations have not been made, right? That would tell me there is a problem.

What I am wondering is if we are to have a similar problem with sodbuster? Are we going to have insufficient resources? Please understand, I do not blame you one minute for not having those determinations made. You were given an assignment that was much larger than the resources given you to meet the assignment. I do not lay any fault at your door, for not having all those determinations made. It was an inhuman, impossible task.

What I am wondering, in terms of the timeframe, is do we have any similar problems coming up? That is, do we have insufficient resources to do what has been assigned you? Are there areas that require clarification in the law that you can see are going to be potential areas of problems like we have seen with swampbuster? In swampbuster, we have interpretation problems, we have questions of the penalty, whether or not that is a reasonable penalty. Do you see areas where we might have a controversy with sodbuster? If so we must look ahead and identify them now, so we can deal with them on the front end.

Mr. GRAY. Mr. Scaling has asked me to cover this one, Senator Conrad.

I think most of them have pretty well been identified. I do not think we will ever see the same kind of controversy with sodbuster that we have seen with swampbuster, mainly for one reason. That is the definition is much clearer to a producer. He is sodbusting if it was not used to produce an annual crop any one of the years between 1981 and 1985. He does not have any problem understanding that.

Where he has the definition of a wetland is more complex and there is some disagreement out there among producers whether this tract is or that tract is not.

In terms of sodbuster, it either was farmed during those years or it was not. We are not seeing that same kind of controversy. We had some early controversy over some clearing of turn rows and this sort of thing, but I think we have that worked out.

We do not believe that it was ever intended to keep a farmer from clearing a turn row, for example. We got that worked out.

I do not believe we will ever see that same kind of controversy.

Senator CONRAD. How about the manpower question in terms of plans, the analysis and approval of plans? Are there sufficient resources, manpower provided, to get that job done in a timely way?

Mr. SCALING. Yes, sir. We will have our plans done. Everybody that wants a compliance plan will have one by January 1, 1990. As Senator Harkin said, you are probably going to have a small percentage that will not, but I am not worried about that small per-

centage. I want to be there to have a plan available for anybody that wants one. And we can do that. That will be done.

Senator CONRAD. When you talk about a small percentage, can you give us some idea of what is in your mind?

Mr. SCALING. I do not know. I do not know how many people are going to wait, thinking this 1990 date is going to be shifted. I do not see any reason to shift the 1990 date because people that want plans are going to have them. The people that are going to wait—

Senator CONRAD. Can you give us some idea of what percentage of farmers who are covered under this would currently have a plan? What percentage are left to go? What kind of progress is being made?

Mr. SCALING. I will have to submit that. I do not have those figures.

Senator CONRAD. Can you give me some feel for it? Is good progress being made? Are people waiting until the last minute?

Mr. SCALING. No. Right now, we are ahead of schedule, right now. All across the Nation, 65 percent by the end of this year nationwide.

Senator CONRAD. For the record, could you give us the completion rate and what you anticipate it will be by the end of next year? If you could break this down by State, that would be very helpful.

Again, I would leave open for you to identify any potential areas of major controversy. I am not talking about nitpicking so you—

Mr. SCALING. You are talking about on compliance, swampbuster, sodbuster, the whole thing?

Senator CONRAD. Right. Major areas of controversy. I think on swampbuster, we pretty well can identify them. On swampbuster, I would be interested in having a current status report and to get your sense of what's happening there.

And on sodbuster, I would be very interested in your analysis of major controversies that we might face, whether they are questions of manpower or they are questions of completing plans on time, or if they are questions of compliance, questions of the penalty or major areas that may develop into controversy. With your analysis we could deal with controversies ahead of time, and get ahead of the curve.

Mr. SCALING. OK.

Senator CONRAD. Thank you, Mr. Chairman.

Senator HARKIN. I previously said I didn't have any more questions. But I do have two more for clarification.

In your May 3, 1988, bulletin you said "No reference to 'T' should appear on the guide sheets. The use of 'T' terminology for ACS can be misleading and cause confusion. It is often misinterpreted as a minimum standard."

Why was that paragraph included? Why wouldn't you want to have reference to T? The professionals understand it. They know that it is not a minimum standard but it's used as a guide. If you don't even have a guide, then how do you judge whether a farmer is really substantially reducing erosion?

Mr. SCALING. Why create another standard?

Senator HARKIN. What's the standard now?

Mr. SCALING. Why create something else? If T is what everybody has always aimed for, always been the goal, I'm after flexibility, I'm after conservation. In a lot of areas throughout the country, T is not respected in the agriculture community because it's not something that's concrete. Because for every one person that supports it, you will find another one that is against it.

I have to have people with a good taste, a good sense of conservation ethics that are implementing these plans, putting them on the ground, and these are the farmers. The farmers have to be sold on what they are doing so they can make compliance work.

Senator HARKIN. Let me ask you again. The T values that are derived, are you suggesting that these are just arbitrary values, or are they scientific values based upon sustainable soil loss?

Mr. SCALING. They are not accurate.

Senator HARKIN. I didn't ask how accurate. I said are they scientifically based or are they just arbitrary?

Mr. SCALING. They are arbitrary, sir.

Senator HARKIN. They are just arbitrary?

Mr. SCALING. Yes, sir.

Senator HARKIN. So they are not scientifically based on what sustainable soil loss would be?

Mr. SCALING. In my opinion, they are not, sir.

Senator HARKIN. I think that would come as a surprise to your professionals out in the field, that they did not use scientific methods to determine T values.

Maybe I am operating under a misimpression. I thought they were. I thought they were scientifically based. Obviously within certain parameters. You can't come down and say this is exactly right, but it gives you a guide as to what sustainable soil loss would be within a certain range.

Mr. SCALING. I will provide an article that was in the Journal of Soil and Water Conservation about a year ago for you for the record.

Senator HARKIN. That it is arbitrary?

Mr. SCALING. As I say, sir, as I say, for every one person that says it is one way, you are going to find another person that says it isn't. And it is not defensible in court.

Senator HARKIN. I am just talking about the professionals and how it was derived, and whether or not this could be used as kind of a guide.

Mr. SCALING. Well, of course, to me, sir, a farmer is a professional because he makes his whole living off raising food and fiber.

Senator HARKIN. Now, wait, Mr. Scaling. I have been around farmers all my life just like you have been. Farmers are professional, as you say, they are very economical and efficient, they know how to produce.

But soil conservation can be very technical in very many ways, and unless you have that technical information, unless you have that kind of education, it is not something you just are born with. Once farmers have been shown what you can do to reduce soil erosion, they say, oh, that's wonderful, we'll do that. But they need that technical information; it's like the Extension Service, getting out and telling farmers back in the forties when I was a kid, they should start planting hybrid corn.

Well, my daddy didn't do that, my granddaddy didn't do that, but, OK, I will try it. And once they tried it, it worked fine.

Mr. SCALING. That is exactly what I was talking about, about getting people into the conservation family. I am after the people that have never practiced it.

If I can get them in, then they will see that conservation pays and it pays huge dividends. But I've got to have them get into it because I've got to have a good taste in their mouths, sir.

We are both after the same thing. We are just going about it two different ways.

Senator HARKIN. No, I don't know that we're going about it in two different ways.

Again, I think consistency means a lot. Even if the farmer is on the bitter end of that, even if there is one farmer who says, by gosh, I'm getting hit hard by this, in the long run, I think that farmer will have more respect for SCS, will have more respect for the Department of Agriculture and the Government in general if at least the Government is consistent.

But once that Government starts saying, well, this is what we were going to do, now we will do something else, then it is every farmer for himself, take advantage of the system any way that you can.

Mr. SCALING. As I say, the Washington office of the Soil Conservation Service has not been inconsistent.

Senator HARKIN. Then this is my final question.

Is the June 29, 1987, language still valid?

Mr. SCALING. Yes.

Senator HARKIN. Good. If so, may local conservationists require plans to T levels where it is economically and technically feasible?

Let me repeat that.

If that is so, can local SCS offices require plans to T levels where it is economically and technically feasible?

Mr. SCALING. If the local districts, in consultation with ASCS, these ASCS's are going to stay in our field office technical guides, because you have to have one for highly erodible soils.

Senator HARKIN. I don't understand that as an answer to my question. Let me repeat the question, try it one more time. I do have to get to the bottom of it.

Can local SCS offices require plans by 1990 to T levels where it is economically and technically feasible to do so?

Mr. SCALING. As of right now, no, sir.

Senator HARKIN. The answer is no, they cannot require plans to T levels where it is economically and technically feasible to do so?

Mr. SCALING. No, sir, not as of right now. They cannot require it.

Senator HARKIN. Then the June 29, 1987 rule is no good.

Mr. SCALING. Let me get my expert on here.

Senator HARKIN. Because the Federal Register of June 29, 1987, states "These revisions will have the effect of eliminating a rigid 'T' standard for soil and crop situations where it is not economically or technically feasible or practical to achieve 'T.'"

So again what I am asking is, if it's economically and technically feasible to do so, can a local SCS office require a plan to a T level for a farmer?

Mr. SCALING. I will have to provide that for the record because we are talking from two different—let me, quite frankly, I don't understand what you are asking me.

Senator HARKIN. All right. Well, let me try it one more time.

Mr. SCALING. Can I just provide that for the record?

Senator HARKIN. Well, we'll try it one more time, and if we can't, then we will get it for the record.

Mr. SCALING. Let's try it.

Senator HARKIN. As I read the June 29, 1987, Federal Register, it states that we will not have a rigid T standard. You can have an ACS that will not be held to a rigid T standard, where it's not economically or technically feasible to reach that T. Then you can have an ACS, which basically says if it is technically and economically feasible you can require a plan to a T level, not one plan, but maybe a variety of different plans, and a farmer can pick any one of a number of them, but it has to reach the T level. That's June 29.

I then asked you—just trying to get through this logically if I can—about the May 3, 1988 language. I asked you, is the June 29 language subsumed within this May 3 memorandum that you sent out to your offices, and you said yes.

Mr. SCALING. Yes.

Senator HARKIN. I asked, is the June 29, 1987, language still valid? And you said yes.

Mr. SCALING. Yes, it is.

Senator HARKIN. I then asked the question, I said if that is so, can a local SCS office require a plan from a farmer to a T level where it is economically and technically feasible to do so, and you said no.

Mr. SCALING. If you have input from your ASC County Committee, if you have input from your Soil Conservation Directors, if you have input from ag commodity groups in that county and anybody else that wants to have input on that, I suppose you could require period anything you wanted to require.

But, as of right now, I am going to keep those alternative conservation systems, and hopefully it will keep some common sense in this to where local people have an input to what is happening out there.

Senator CONRAD. I will tell you something. If I ever get in trouble, I want you to represent me in court. [Laughter.]

Senator HARKIN. My staff says that the local Conservation Board always has input into the plans. Always. That's true from what I just found out in Iowa too. They always have the input.

Mr. SCALING. Yes.

Senator CONRAD. Mr. Chairman, may I ask a question? I've got to preside at 11, but something that has come out of your dialog here really raised a question that pertains directly to what you have been asking.

Do the answers you are giving have something to do with the statement you made earlier that the T values would not stand up in court?

Mr. SCALING. Yes.

Senator CONRAD. I mean it seems to me we have a very central question here.

Mr. SCALING. I don't want to lose compliance.

Senator CONRAD. I suspect, in listening to the interchange, that at the heart of this is a determination that has been made. You have counsel, I presume, that makes recommendations to you. Through this interchange, it strikes me that he has been told by his counsel that they don't dare hang their hat on T values. They won't stand up in court. And if he does try to make it stand up in court and they lose, they lose the whole conservation section in a sense.

Is that what's at the heart of—

Mr. SCALING. You're warm. [Laughter.]

Senator CONRAD. In a few more minutes, we'll get hot.

I am going to leave, but I sense that this must be what is going on here, that their counsel has told them that if we go to court on those T values, we are in a very shaky position.

Senator HARKIN. Senator Conrad, let me just say again we get into this argument of what can Washington do? It seems like we have kind of come full circle, Mr. Scaling, from what you said when you assumed the table about having Washington dictate the rules.

It almost seems that Washington is now saying to those local SCS offices that they can't do this. They can't require—even though the Conservation Board approves it and it is economically and technically feasible and practical—they cannot require a reduction of soil losses to the T level. That's Washington dictating to what local people can and cannot do, Mr. Scaling. Is that right?

Senator CONRAD. And the motivation behind that seems to me to be that they have legal counsel telling them they don't dare hang their hat on that.

Senator HARKIN. Is that so? Is your legal counsel telling you that you cannot let these local Conservation Boards—

Mr. SCALING. No, they have not, no. But I have not been instructed that way.

Senator HARKIN. Let me get the question correct.

Is your legal counsel suggesting or advising you that you cannot permit local SCS offices to require a reduction of soil losses to T levels where it is technically and economically feasible to do so?

Mr. SCALING. No, they have not told me that. I have never asked that question.

Senator HARKIN. So it doesn't enter into the equation.

Senator CONRAD. I have a feeling though that what's happening here is similar to when I was an administrator. There were times that my counsel would tell me that is a question you don't want to ask.

From listening to this conversation, it just strikes me that Mr. Scaling indicated earlier, in an offhand comment, that the T values might not stand up in court.

Now, somewhere, he has gotten that idea. I would guess it is probably from some conversations that have gone on, but that's—

Senator HARKIN. May I ask you a question? What do you mean when you say "won't hold up in court"? As to what aspect?

Senator CONRAD. Well, I suspect, and again I'm just trying to read between the lines here, that they have had a discussion in the

agency and talked about what happens if somebody brings a suit and says, oh, you can't hold me to this standard. This standard is not supportable. And that somehow through conversations that they've had, that the Administrator suspects that this is the case—if he tries to adhere to a strict reading of a T scale or T standard, this will leave him in some legal jeopardy.

Senator HARKIN. Well, I would just suggest that no one is mandating any farmer to do anything. If you don't want to be in the farm program, if you don't want to have farm program benefits, you can do whatever you want to do on your farm. That is all it is. The Government is not saying you have to do this.

It is just saying if you want farm program benefits you must reduce soil erosion—to T levels if it is economically and technically feasible and practical to do so. And I believe that will hold up in court.

Senator CONRAD. I'm not suggesting this is my position. I am just trying to understand the dialog that has gone on here. And all I can read is that Mr. Scaling made the statement he doesn't believe the T values would hold up in court. I don't know whether his legal counsel told him that or——

Mr. SCALING. No, legal counsel did not tell me that.

As I said, for every person that believes in T, there is another person that doesn't believe in it. These are professional people saying this.

Senator HARKIN. We can't get stuck in a rut on this question.

Senator CONRAD. Did you have any consultation with State and local Soil Conservation authorities before you sent your May 3 letter out?

Mr. SCALING. Yes.

Senator HARKIN. You did?

Mr. SCALING. Yes.

Senator HARKIN. In States other than those six or seven States to which you earlier referred?

Mr. SCALING. Yes. I talked to a lot of people all across the Nation.

Senator HARKIN. Well, OK. I think we are getting somewhere.

If the June 29, 1987 language is still intact, I still don't have the answer to that question I asked, but perhaps we will just have to get that for the record—whether local conservationists can still require plans to the T level if it's economically and technically feasible and practical to do so.

I'll write that question out and you can get it to the people at SCS and answer it.

Mr. SCALING. OK.

[See page 43 for the response to Senator Harkin.]

Senator HARKIN. Thank you very much, Mr. Scaling.

Mr. SCALING. Thank you, sir.

Senator HARKIN. We will get the question to you within a few days. If we could get an answer back in a week or something like that, that would be good.

Mr. SCALING. No problem.

Senator HARKIN. OK. Thank you very much.

Now our first panel: James Gulliford, director of the division of soil conservation of the Iowa Department of Agriculture and Land

Stewardship; Clarence Durban, president of the National Association of Conservation Districts; Glenn Stoddard, executive director of the Wisconsin Land Conservation Association; and Lloyd Cline, past president of the National Cotton Council.

That's our first panel. Mr. Gulliford I know. Glenn Stoddard and Mr. Cline.

Well, I apologize for taking so long. But as you can tell from sitting there, it takes awhile to get through some of these questions.

I have your prepared statements and they will be made a part of the record in their entirety.

I would like to ask each of you—just going right down the line, Mr. Gulliford, Durban, Stoddard and Cline—ask if you could just take 5 minutes—I will give you a little leeway on that—to summarize your prepared statement, make your major point so we can have a little give and take.

So if you will keep track for me on the 5-minute time period or something like that, not rigid—please keep that in mind. Mr. Gulliford, I recognize you first.

STATEMENT OF JAMES B. GULLIFORD, DIRECTOR, DIVISION OF SOIL CONSERVATION OF THE IOWA DEPARTMENT OF AGRICULTURE AND LAND STEWARDSHIP, DES MOINES, IA

Mr. GULLIFORD. Thank you, Mr. Chairman. I appreciate the opportunity to offer this testimony on behalf of the Iowa Department of Agriculture and Land Stewardship, and the State Soil Conservation Committee for the State of Iowa. We appreciate you holding this hearing.

I would just like to state that implementation of conservation compliance provisions is frustrating Iowans in every sector, our farmers, our soil and water conservationists and urban population.

First, the frustration centers on the unwillingness of the Soil Conservation Service to allow us to maintain an acceptable level of technical quality for implementation that assures compliance to a standard which adequately protects our soil and water resources.

Second, the unwillingness of SCS to enter into a dialog on this issue with the State and local officials who are most affected by implementation of this program, and upon whose shoulders implementation falls as equal partners with the Soil Conservation Service.

Let me explain. In June of 1987, in Iowa, we began implementing a program of alternative conservation systems.

This ACS program dealt with the principal economic hardship concerns that Iowa farmers had for the conservation compliance program. To my understanding, we may have been the only State that looked at economic criteria. And those were the cost of structural practices and any requirements that would force Iowa farmers away from a continuous row crop management system, that would then result in a reduction of their corn base. It provided an option for Iowa farmers to choose that would allow, regardless of highly erodible soil type, continuous row crop production if the farmer implemented best management practices that included contouring, no-till, and proper residue management.

When we fell back to this position in this ACS program from the strict T standard, it did not satisfy all soil conservationists in the State. And we regret that it didn't achieve the 85 percent T goal. But it did provide a practical compromise.

SCS projections were that, if all farmers chose this least restrictive system, 5.5 million acres of Iowa's 8.2 million acres of highly erodible land would be farmed at T. There would still be 2.2 million acres that would be farmed with soil losses from T and 2T; and 500,000 acres which would be farmed greater than 2T.

The average soil loss, if you looked at this scenario, on those highly erodible acres, would be reduced to 6.1 tons per acre per year. The staff went out and began implementing the program and doing a good job. In fact, in June of 1988, we had 38 percent of those conservation plans completed to that standard that I just described. And my office had received no calls from any landowner disturbed that we were requiring too much nor, to my knowledge, had SCS received calls from any Iowa farmer of those 38 percent who had their plans completed. In fact, most staff were very pleased with the response that they were getting from landowners.

The background of this positive implementation that was going on was interrupted by the issuance of SCS National Bulletin No. 180-8-31, which is the May 3 bulletin, in which State conservationists were directed to establish ACS's that would allow acceptable compliance that did not achieve T for every highly erodible soil type.

Now, where we had originally predicted two-thirds to go to T, now we project that potentially none of those soils would go to T. That was the intent of that memo. And that potentially 15 percent of the highly erodible soils will be farmed with an annual soil loss in excess of 3T, and that if you look at average annual soil loss under this scenario, conceivably it will be at 9.6 tons per acre per year. That's 55 to 60 percent higher. And I would contend that that is a significant loss of conservation compliance.

Previous testimony talked about the cost of implementing erosion control, but it didn't talk about the cost of not implementing erosion control, the cost to farmers and the public when the erosion occurs.

In April of 1988, SCS issued a technical report that projected costs of erosion, those losses being due to reduced yields, fertilizer cost, and additional energy necessary to till subsoil.

Given all the positive benefits of plant breeding programs, to my knowledge, no company has ever announced or introduced a variety of corn plant that grows better in subsoil than it does in topsoil. And I would suspect that that's probably true with wheat and soybeans and cotton as well.

While the overall ability to produce commodities in this country continues to increase due to improving technology, the potential—and that is the key issue—the potential to produce has already decreased significantly due to soil resource depletion.

Similarly, there is an offsite cost associated with excessive erosion, and I believe that the urban constituents who are watching us as we implement this program are going to be looking for significant accomplishment, and I seriously doubt that as they look at the compliance level that has now been set up in a State like Iowa,

they are going to be determining that it is either adequate or consistent with the intent of the laws passed.

Another major impact of the SCS directive is the impact it is having on field office programs. Policy changes of this nature have destroyed the credibility that field office staff have with the farmers. The success we had in implementing our initial efforts of this program to convince people that it would be done in a strict time-frame came from a total statewide commitment to the concepts that the program is for real, the deadline is firm, and the compliance level required will not change. And this has now been lost.

Implementation of Directive 180-8-31 has proven to farmers that, if they wait, the requirements will change. There is no incentive to cooperate and get the job done early. Additionally, every farmer who planned to a stricter standard has the right to expect us to revise that plan to the lesser standard that's now in place. This policy has effectively increased field office workloads.

My final concern is with the manner in which policy decisions, such as this, are unilaterally made for the States and districts. When it's done unilaterally and no interaction with State and districts occurs, everything breaks down. The conservation provisions of the Food Security Act are not only a Federal program. They cannot be implemented by Federal personnel alone. The program is authorized by the Federal legislation, that's true, but it is being implemented through local soil and water conservation districts, field offices and staff across the country. These districts are duly authorized by State statutes and exist at the initiative of the local people. The local commissioners and supervisors establish policy and long-range plans for their district. The field offices are staffed by employees of Federal, State and local units of government. The entire organization and implementation of this program rely on a partnership that is jeopardized when any party to the partnership takes unilateral actions.

State and local conservation partners should have been consulted on this issue. We were not; and our concerns, since then, have been totally ignored. We have been forced to accept program guidance that was not necessary, will produce less effective conservation results, has caused confusion on the part of staff and farmers, creates more work, and reduces the credibility of the entire soil conservation partnership. These problems could have been prevented through discussion and negotiation. They won't go away given the current policy of ignoring them. This policy should be reversed.

I am asking that the USDA allow us to implement the Conservation Compliance Program in a manner that fits the needs of Iowa, our farmers, and our conservation goals. For Iowa, I am again asking that we be allowed to return to the first set of alternative conservation systems established by USDA-SCS prior to Directive 180-8-31. I would remind you that those ACS's were based on economic hardship criteria.

Conservation compliance, along with the other conservation provisions of the Food Security Act, is vitally important to the long-term health of agriculture. Together, these programs offer a rare

opportunity to strengthen the ties of agriculture to urban and environmental interests. They serve the best interests of farmers and the public, and we must do everything we can to effectively and successfully implement them.

[The prepared statement of Mr. Gulliford follows:]

Statement by James B. Gulliford, Director
 Division of Soil Conservation
 Iowa Department of Agriculture & Land Stewardship

Review of Soil Conservation Service Implementation of the Conservation
 Compliance Provisions of the Food Security Act of 1985
 Subcommittee on Nutrition and Investigations
 Washington, DC
 October 4, 1988

My name is James Gulliford. I am Director of the Division of Soil Conservation of the Iowa Department of Agriculture and Land Stewardship. I offer this testimony on behalf of the Iowa Department of Agriculture and Land Stewardship and the Iowa State Soil Conservation Committee. Thank you for conducting this hearing on the implementation of the Conservation Compliance provisions of the 1985 Food Security Act; specifically the use of Alternative Conservation Systems (ACS).

Implementation of the Conservation Compliance program is frustrating Iowans in all sectors; our farmers, soil and water conservationists, and urban population. Concerns center on:

- 1) The unwillingness of the Soil Conservation Service (SCS) to allow us to maintain acceptable technical quality for implementation that assures compliance to a standard which adequately protects our soil and water resources, and meets our obligation to the intent of the act and the rules promulgated to implement it.
- 2) The unwillingness of SCS to enter into a dialogue on this issue with the state and local officials who are most affected by implementation of this program, and upon whose shoulders implementation falls as equal partners with the Soil Conservation Service.

In Iowa, the problems associated with cropland erosion are characterized in terms of reduced productivity of eroded fields, and off-site impacts of sediment. Response to these problems has included a substantial program investment on the part of the state in annual appropriation for field office personnel and financial incentives. Similarly, commitment of soil and water conservation district commissioners and county financial resources have contributed to build local programs that have done an excellent job of communicating to landowners the importance of the erosion problem. Add to this the efforts of dedicated, professional SCS personnel, and it's easy to recognize the reason for successes to date that have been achieved through our conservation programs.

A working partnership has been carefully crafted to educate landowners with respect to the value of protecting the soil and water resources of the state, and to assist them in the development of technically sound, economically feasible solutions to their erosion problems. Likewise, the argument can be made that this partnership has contributed to acceptance on the part of Iowa farmers, the principle of conservation compliance; that a reasonable level of erosion control shall be implemented within a reasonable period of time to maintain eligibility for USDA farm program benefits. Farmer acceptance of this cross compliance concept has been reflected in a number of polls taken in Iowa.

Given this background, soil and water conservation districts in Iowa began implementation of Conservation Compliance provisions. District staff went to work on "Highly Erodible Land" (HEL) determinations, and commissioners went to work to publicize the program to landowners; encouraging them to plan early. In many cases commissioners were the first to develop plans or host conservation planning meetings in their communities.

Basic conservation plans were developed to "T" (tolerable soil loss limits) knowing that districts had been told that an appeal process would be provided for farmers who felt that implementation of those plans would create an economic hardship in their case. Opportunity for individual exemptions was promised.

However, rather than an appeal process, in June of 1987 SCS implemented in Iowa a program of Alternative Conservation Systems.

This ACS program dealt with the principal economic hardship concerns that Iowa farmers had for the Conservation Compliance program; the cost of structural practices and any requirements that would force Iowa farmers away from a continuous row crop management system, that would then result in a reduction of their corn base. It provided an option for Iowa farmers to choose that would allow (regardless of HEL soil type) continuous row crop production if the farmer implemented management practices that included contouring, no-till, and proper residue management. Other options at varying costs were also available.

The fall-back to this ACS program did not satisfy all soil conservationists, but it did provide a practical compromise. SCS projections were that, if all farmers chose this least restrictive system, 5.5 million acres (2/3) of Iowa's 8.2 million highly erodible land acres would be farmed at T; 2.2 million acres (1/4) would be farmed with soil losses from T to 2T; and 500,000 acres (1/12) would be farmed greater than 2T.

Field staff across the state went to work to implement the program. Given the credibility of field office staff and the support for the program from Iowa conservation and farm organizations, implementation proceeded smoothly and quickly. By the end of June 1988, 80 percent of Iowa's HEL determinations had been made and 38 percent of our conservation plans were completed; all without any significant negative reaction. Rather most staff were pleased with the acceptance and willingness they found on the part of farmers.

This background of positive, cooperative accomplishment was interrupted by the issuance of SCS National Bulletin No 180-8-3 in which state conservationists were directed to establish Alternative Conservation Systems that would allow acceptable compliance at less than tolerable soil loss for every HEL soil type. Additionally, all references to T were required to be removed from ACS guidelines.

This action created immediate problems in that it significantly reduced the conservation accomplishments we can expect from the program, it created confusion on the part of farmers, and it undermined the credibility of the conservation partnership.

Where we originally projected 2/3 of our HEL soils to be farmed at T, potentially none of those 8.2 million acres will reach T. Equally disturbing is that potentially 15 percent (1.2 million acres) of our HEL soils will be farmed with annual soil loss in excess of 3T.

A second major concern is the removal of T references from ACS sections in the field office technical guides. Tolerable soil loss is a most important concept to farmers. Throughout our state, districts have worked to help our farmers understand the consequences of soil loss in excess of T.

In April of 1988, the SCS released a special report on soil depletion that was prepared as a part of the Northeast Iowa River Basin Study. The study projects the impact of continued excessive erosion on the productivity of agricultural soils. Costs of erosion are projected due to reduced yields, increased fertilizer costs and additional energy necessary to till subsoil. It also concludes that, "These eroded soils will never fully recover to their uneroded condition under present cropping conditions and erosion rates. Therefore, current and projected depletion costs are nonreversible."

Contrary to the SCS directive which stated that use of T may be misleading, I feel that we mislead farmers when we fail to properly explain the concept of tolerable soil loss. When farmers are provided an Alternative Conservation System that does not achieve T it is most important that they understand its significance to their long-term economic situation. There is a cost associated with the short-term economic relief they are being given. As stated in the depletion study "While the overall ability to produce continues to increase due to improving technology the potential to produce has decreased significantly due to soil resource depletion."

Similarly, there is an off-site cost associated with excessive erosion. This is a cost borne by the entire public, as well as the farmer. An SCS funded 1986 study of the off-site costs of erosion in Iowa estimates an annual cost of \$32.2 million. Urban constituents who are following the implementation of this act, expect effective compliance that significantly reduces the off-site impacts of erosion. I seriously doubt that they will find compliance levels as established by directive 180-8-31 to be either adequate or consistent with the intent of the act as legislated.

A third major impact of the SCS directive is the impact it is having on field office programs. Policy changes of this nature destroy the credibility that field office staff have with the farmers. The success we had in our initial efforts to implement conservation compliance within its strict time frame came from total statewide commitment to the concepts that the program is for real, the deadline is firm, and the compliance level required will not change. This is now lost.

Dr. Peter Nowak released survey results on July 25, 1988, of a poll taken of USDA field staff in SCS, ASCS, and extension offices. This poll was conducted on behalf of the Soil and Water Conservation Society. It found that 74 percent of USDA employees responded that "they believe most or all farmers accept the idea that they should be required to conserve soil in return for commodity programs and other farm payments and loans from the Federal Government. Sadly, three-fourths of these same USDA employees said "most farmers believe the timetable for implementation of the conservation provisions will change and enforcement of the compliance provisions will be relaxed".

Implementation of Directive 180-8-31 has proven to farmers that, if they wait, the requirements will change. There is no incentive to cooperate and get the job done. Additionally, every farmer who planned to a stricter standard has the right to expect us to revise that plan to the lesser standard. This policy has effectively increased field office work loads.

My final concern is with the manner in which policy decisions, such as this, are unilaterally made for the states and districts. The conservation provisions of the Food Security Act are not only a federal program. They cannot be implemented by federal personnel alone. The program is authorized by federal legislation but is being implemented through soil and water conservation districts, field offices, and staff across the country. These districts are duly authorized by state statutes and exist at the initiative of the local people. Local commissioners and supervisors establish policy and long-range plans for their district. The field offices are staffed by employees of federal, state, and local units of government. The entire organization and implementation of this program rely on a partnership that is jeopardized when any party to this partnership takes unilateral actions.

State and local conservation partners should have been consulted on this issue. We were not; and our concerns, since then, have been ignored. We have been forced to accept program guidance that was not necessary, will produce less effective conservation results, has caused confusion on the part of staff and farmers, creates more work, and reduces the credibility of the entire soil conservation partnership. These problems could have been prevented through discussion and negotiation. This policy should be reversed.

I am asking that USDA allow us to implement the Conservation Compliance program in a manner that fits the needs of Iowa, our farmers, and our conservation goals. For Iowa, I am asking that we be allowed to return to the first set of Alternative Conservation Systems established by USDA-SCS prior to Directive 180-8-31. I am also asking that for any state where the federal, state, and local partnership determines that an ACS is fair and effective, that they be encouraged to make that decision together and implement it.

Conservation Compliance, along with the other conservation provisions of the Food Security Act, is vitally important to the long-term health of agriculture. Together, these programs offer a rare opportunity to strengthen the ties of agriculture to urban and environmental interests. They serve the best interests of farmers and the public, and we must do all we can to effectively and successfully implement them.

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Senator HARKIN. Thank you. I would like to get into a discussion with you right now. But in the interests of time and the other witnesses, I'll just go right ahead to Mr. Durban.

STATEMENT OF CLARENCE DURBAN, PRESIDENT, NATIONAL ASSOCIATION OF CONSERVATION DISTRICTS, WASHINGTON, DC

Mr. DURBAN. Thank you, Mr. Chairman.

My name is Clarence Durban and I am the president of the National Association of Conservation Districts. I am also a landowner. I am also a supervisor on my own local district board in Union County, Ohio.

In the position of president of NACD, I represent some 3,000 soil and water conservation districts and those 17,000 supervisors across the country who manage those local boards.

Conservation districts are an integral part of the conservation provisions of the Food Security Act of 1985. And as a result of that, Congress charged those districts with the responsibility to approve all of the new conservation plans that would be required by FSA to ensure that local people help to lead the Federal agencies through the program.

And let me begin by stating that NACD supported the use of alternative conservation systems [ACS's] since those rules were first proposed for conservation compliance. And that support was based on two very important requirements.

Those requirements were that ACS's must significantly reduce erosion, and the decision to use ACS's must be made by the local conservation district officials.

We knew, back early on, that there would be situations where the use of the standard conservation systems found in the field office technical guide could place a heavy financial burden on some farmers. So therefore, we supported ACS's as a means to both help the farmer comply in a reasonable manner, and at the same time, reduce erosion.

I believe at the time, and I still believe, that if local people decided to adopt the use of those systems, we could still reach Congress' goal of significantly reducing erosion if in fact those local people had some input into those situations at the local level.

Every report that I'm receiving from Federal, State and local officials tells us that presently erosion is being reduced. It's being reduced on lands to which application of an alternative system would be the owner's first conservation measure.

There are also some reports suggesting that those ACS's will allow erosion to increase. I think that sometimes we need to look at those in the proper light, when in fact in some individual cases the erosion may increase.

But on a nationwide program, it's suggested, and I believe in fact, that conservation compliance has reduced erosion on some lands.

There is also of course some concern as to the use of alternative systems, and what impact that will have on State and local erosion control programs.

I think that in many cases those programs can be helped with the compliance program that we now have. There are more farm-

ers than ever before coming into my own local district, and indications from across the country that comes to my office suggests that more farmers are coming into conservation district offices seeking conservation planning assistance.

And these State and local program managers have a greater opportunity to explain, at least to some farmers that we never saw before, the difference between the programs and the need for some conservation measures on their land.

I believe at this point in time that the most important thing we can do is to move ahead with implementation of the conservation compliance program as it's laid out now.

There are many of us who would have implemented it differently, and I'm one of those. However, I believe we must first see how the current program will impact soil erosion before we pass final judgment.

I suggest proceeding without change until the plans are fully implemented.

As a landowner, I would be very concerned were it to be suggested to me and to the operator of my land, that we now need to go back and once again change a farm compliance plan—and it is not a conservation plan; it is a compliance plan—that we would need to change that at this point in time.

I fear a tremendous amount of further confusion. And I believe that we can make some headway if we proceed with the current program.

I hope we've learned a valuable lesson. I hope USDA and SCS has learned a valuable lesson, along with the conservation districts, and the State associations and State offices.

We need to work together. And I think that if and when we decide it isn't the issue of who gets the credit, but whether or not we are in fact protecting the resources across this Nation, I think that's the bottom line.

And I think it's time for us to move forward with the plans we now have, to get some conservation measures on land, and on some farms that we would not have seen the individual in the district office prior to now.

Thank you, Mr. Chairman, for the opportunity to appear today.
[The prepared statement of Mr. Durban follows:]



Statement of
The National Association of Conservation Districts
on the Use of Alternative Conservation Systems for Conservation Compliance

Presented by

Clarence Durban, NACD President

Subcommittee on Nutrition and Investigations

Senate Committee on Agriculture

October 4, 1988

Mr. Chairman, members of the Committee, my name is Clarence Durban and I am the President of the National Association of Conservation Districts. I appreciate the invitation to appear before you today.

NACD is the national organization which represents this country's almost 3,000 soil and water conservation districts and the more than 15,000 women and men who serve on their governing bodies. Districts were founded on the premise that resource conservation programs could be successfully implemented only if local people were directly involved in the program. This philosophy has been the hallmark of conservation district activities for the past fifty years. We have shown that it works, and works well, to have local people solve local problems.

As you are aware, conservation districts are required by the 1985 FSA to approve all conservation plans developed for sodbuster, conservation reserve, and conservation compliance. Contrary to what some may think, the district boards of this country do not simply "rubberstamp" the plans being developed by SCS field personnel. Instead, districts provide local direction to the Federal programs. They lead the landowners through a process which results not only in protection of our natural resources by reducing soil erosion, but also in the protection of the economic health of the operator and the local community.

Today you have asked us to provide you with our opinion of SCS's decision to utilize alternative conservation systems (ACS's) in implementing the conservation compliance provisions of Title XII of the 1985 Food Security Act. Let me say from the outset that NACD has supported the use of ACS's since the first rules for the programs were published. In our comments to USDA on their interim rules for the conservation programs two years ago, we pointed out the need for these systems. We also reminded

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the agency, however that alternative systems must still provide for significant and substantial reductions in erosion. Although we would have preferred if SCS would have allowed state and local officials to determine where and under what circumstances ACS's would be allowed, in our opinion it would be very damaging to change the program rules again at this time. Farmers need to know what is required of them and to make further adjustments would only further confuse those who are trying to comply.

The real driving force for our position on alternative conservation systems was the recognition that it would not be economically feasible for some farmers to bring soil erosion levels down to the soil loss tolerance level. We wanted to make sure that no farmer was faced with implementing a conservation plan that would force them out of business. Our goal was to ensure that erosion control was accomplished without driving farmers off the land.

We took this position because we knew districts would have to balance the erosion control benefits of any suggested conservation system with the cost required for its implementation. In most cases, the existing Field Office Technical Guide (FOTG) in the district office provided the district, the farmer, and the SCS with the flexibility necessary to design a complete erosion control system that was affordable and practicable given local conditions. We also knew there were going to be those times when what was needed would be innovative planning that allowed for flexibility outside the FOTG.

I think that perhaps it is important to review what Congress seems to have intended with passage of the conservation provisions of the 1985 Food Security Act. I think it is fair to say that there were two distinct goals of that historic legislation. First, Congress stated that they wanted to ensure that federal farm program benefits would not encourage the destruction of our more fragile land types to increase production; thus Sodbuster and Swampbuster were enacted. Second, Congress felt that it was important to reduce the degradation of existing cropland by soil erosion, while protecting the economic viability of the affected farmer; that resulted in conservation reserve and conservation compliance.

I firmly believe that these two goals resulted in separate standards for judging what was an adequate level of protection for these different classes of land. For Sodbuster and Swampbuster, there is a clear case for zero tolerance, to use a common phrase. NACD and conservation districts firmly believe that in today's world there is no reason why anyone should be allowed to receive Federal farm benefits for bringing new land into production that results in serious degradation of our natural resources. As a result we support SCS's decision to use "T" as the erosion reduction standard for Sodbuster.

However, the treatment we prescribe for land already in the production cycle has to be approached from a different perspective. We do not feel that resource protection concerns are easily separated from the economic concerns of land managers. For that reason, we urged USDA to adopt a conservation compliance program that embodies a common sense approach to conservation planning. The use of ACS's under conservation compliance allows for flexibility and common sense, and if properly used will result in substantial reductions in erosion without driving farmers off the land.

Every report we have received from our members, from state conservation agencies, and from the Federal agencies we work with indicates that overall levels of soil erosion will be reduced through use of alternative conservation systems. I recognize that you may have heard that ACS's will allow erosion to actually increase, but statements like that need to be carefully analyzed. While some ACS's will allow for erosion to proceed at a rate higher than "T", erosion will still be significantly reduced.

I also want to take a moment to address the problems that have come to the forefront in several states where requirements of state and Federal programs differ. It is not unusual for states to have more stringent guidelines for programs than their Federal counterparts.

We have several states with laws that call for erosion on cropland to be reduced to "T" levels at some time in the near future, such as Iowa's "T by 2000" program. I believe that conservation compliance does not destroy the ability of states to establish stricter standards. In fact, I believe that compliance actually provides opportunities for state and local programs that did not exist before 1985.

The Federal program will be bringing more farmers and land owners into conservation district offices than ever before. This program will allow us to get conservation plans in place on more farms at one time than ever before and I believe that is what the law was intended to accomplish. Districts and states will have more access to farmers with erosion problems than ever before. If SCS will help us to make the distinction between state and Federal programs, and to assist with technical assistance to meet state standards when requested, then all of these various programs will be served.

I would like to add just one more point on using alternative conservation systems. We need to put this controversy behind us and move forward with implementing the conservation compliance program. We have the ability to significantly reduce soil erosion in the next few years, but continued bickering over which approach is "best" will not help protect our resources. Regardless of individual or organizational philosophies involved, our goal must remain the protection of our soil and water resources in a reasonable manner.

My other hope is that we have learned an important lesson from this situation. The history of conservation district, state, and Federal soil conservation programs has been one in which cooperation has been the key. We can see that if we fail to cooperate and include all partners - local, state, and Federal governments, public interest groups, and private citizens - no program, regardless of its goals, will be a success. It is my sincere hope that the problems incurred over the use of ACS's will renew all of our efforts to communicate better and to cooperate to protect our resources.

Thank you for the opportunity to appear before this Committee. I would be happy to answer any questions.

Senator HARKIN. Thank you, Mr. Durban.
Mr. Stoddard.

**STATEMENT OF GLENN M. STODDARD, EXECUTIVE DIRECTOR,
WISCONSIN LAND CONSERVATION ASSOCIATION, MADISON, WI**

Mr. STODDARD. Thank you, Mr. Chairman.

My name is Glenn Stoddard and I am the executive director of the Wisconsin Land Conservation Association. I appreciate the invitation to appear before you today on the issue of conservation compliance and alternative conservation systems.

Our association represents Wisconsin's 72 county land conservation committees, which are like conservation districts in most other States.

Wisconsin has provided national leadership on soil conservation. We had the first national project in 1934 near LaCrosse. Since then we've developed a number of progressive State programs and strong local programs, including statutory goals to achieve "T" by the year 2000, and State cost sharing. We have our own technical assistance programs that work hand in hand with SCS. And we're dealing with the problem of nonpoint source water pollution.

One of the programs we have is a farmland preservation program that has its own conservation compliance feature that is tied to State property tax/income tax credits. We've made some great progress with these programs, but we've been handicapped a bit over the years by the Federal programs, which have encouraged people to farm highly erodible land and wetlands.

We were hopeful that with the 1985 farm bill and the conservation compliance provision that this would end. Unfortunately, though, the integrity and promise of conservation compliance has been broken by USDA.

The May 3 memo on alternative conservation systems from the SCS Chief was the final straw, but there was confusion before that. As a result, we've had a number of problems and concerns in Wisconsin.

First, there was the confused, top-down process followed by SCS in developing and implementing the current policy. Throughout this process, the national SCS office paid little attention to input provided by our land conservation committees, State agencies, and local SCS staff, and other interested parties on the development and approval of ACS's. This process has strained the morale in many of the SCS offices, which I believe is now at an all time low. And it has strained the State and local programs that have worked in cooperation with SCS.

For instance, with our farmland preservation program, we do require that farmers get down to the T level. Many of the farmers that participate in that program also participate in the Federal commodity programs. So now we have a double standard. As a farmer comes in, we've traditionally tried to work with that person and make them eligible for all the programs, State and Federal. But now we have to tell them that there is one standard for the Federal program and another standard for the State program.

And as we get into water quality issues, I fear this kind of problem will continue.

We haven't had a problem getting to T levels in Wisconsin, or at least to near-T levels. And flexibility has always been something we've been concerned about.

Now with the alternative systems in Wisconsin, we're seeing the possibility of allowing farmers to continue to get their Federal commodity program benefits, but also to have four to five times the tolerable level of erosion on some lands.

That means, in some cases, they may actually increase their erosion rates.

Another problem is the timing of this policy shift. Initially, after the farm bill passed, our conservation professionals in the field were working very diligently with extension and other organizations and agencies involved in conservation to notify farmers about compliance requirements, and also to use compliance as one incentive for getting land into CRP.

There was the threat of compliance coming down, and people were told that compliance would indeed be a reality, and would stick.

As a result of this policy shift, the rug has been pulled right out from under the SCS professionals in the field. I think they're feeling that their credibility has been diminished greatly by this policy.

It's curious that the policy was changed when it was, because of the deadlines in the Food Security Act, 1990 to have the plans; 1995 to have them implemented.

This raises the question, which people are asking all over Wisconsin: Why are we relaxing the standards now before we even have to have the plans? It seems that it might be more appropriate to do that during the period of implementation, when we have a better idea of what the economic situation is in the farm economy, and so forth.

A final problem, and this is very troubling, is the signal this policy is sending to farmers about conservation. As I've mentioned, we've been working with farmers over the years through various programs. And the T standard has been one of the major tools used to inform farmers about good conservation practices, and we've used it to instill a land ethic.

In a sense, this policy says that conservation really isn't important, and that T has no value.

Yet we know that T levels are valuable, and despite the fact that they've been discredited here this morning, I think the literature will show that T levels are actually higher than they should be in many cases; not lower than they should be. And that they already do provide quite a bit of flexibility.

But beyond that, there are a couple of lessons that we, and hopefully, the administration can learn from this experience.

First, I suggest that there be a thorough analysis of the implications of alternative conservation systems, both on soil erosion and water quality. And also, that there be an analysis on the impact of this policy on State and local programs, and what's happening to them as a result of this policy.

Can we continue to have a cooperative Federal, State and local relationship in the face of this kind of policy?

The second challenge is to try to rebuild the partnership between USDA, States, and conservation districts. Here I'm suggesting that any future policies like this be developed by USDA at the State level with a consensus approach, and that conservation districts, State agencies, farm organizations, and conservation organizations all be brought into the process.

That concludes my testimony. I want to thank you again. And I do want to say that I think we're still making progress, but this has been a real setback. And if we have any further setbacks, I'm afraid that our progress will come to a halt.

Thank you.

[The prepared statement and attachments of Mr. Stoddard follow:]



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**Statement of
 Glenn M. Stoddard
 Wisconsin Land Conservation Association**

**Before the
 Senate Committee on Agriculture, Nutrition, and Forestry
 Subcommittee on Nutrition and Investigations**

**On The
 Use of Alternative Conservation Systems
 for Conservation Compliance
 October 4, 1988**

Mr. Chairman and members of the Committee, my name is Glenn Stoddard and I am the Executive Director of the Wisconsin Land Conservation Association. I appreciate the invitation to appear before you today on the issue of alternative conservation systems for conservation compliance.

Our association represents Wisconsin's 72 county land conservation committees (LCCs)--formerly conservation districts. Wisconsin's LCCs have had a long-standing partnership with the Soil Conservation Service (SCS) and other federal and state conservation agencies.

Wisconsin has provided national leadership in advancing soil conservation efforts. In fact, the first federal soil conservation project was initiated in the Coon Creek Watershed near LaCrosse, Wisconsin in 1934. In the 54 years since the Coon Creek Project was initiated, innovative programs to control soil erosion and nonpoint source water pollution problems have been developed in Wisconsin. These include statutory goals to achieve tolerable erosion levels (T) by the year 2000, cost-sharing and technical assistance for soil erosion and nonpoint source water pollution control, and a unique soil conservation compliance program tied to state farmland preservation tax credits. Additionally, many LCCs have their own technical and administrative staff working in the field to implement these and other programs on a cooperative basis with USDA agencies. Taken together, these programs constitute an annual expenditure by Wisconsin's state and local governments of approximately \$40 million.

This progress has been made for two basic reasons. First, excessive soil erosion and nonpoint source water pollution are major problems recognized by farmers and nonfarmers alike. Second, professional conservationists have had the technical capability and credibility to address these problems and implement programs using cost-effective conservation practices and reasonable professional judgement to achieve T or near T levels of erosion.

Nevertheless, for many years conservation efforts in Wisconsin suffered only moderate success because federal farm commodity programs encouraged farmers to maximize production on even the most highly erodible lands and wetlands. But the 1985 Food Security Act held out the promise that this would change. The conservation compliance provision of the Act is of particular importance because of its potential impact on highly erodible land already suffering from excessive erosion.

Unfortunately, however, the integrity and promise of conservation compliance has been broken by USDA.

On May 3, 1988, after changing the regulations and sending confusing signals for over a year, the Chief of the SCS issued a bulletin directing universal application of alternative conservation systems (ACS's) for all highly erodible land subject to conservation compliance. This bulletin and other actions by SCS have resulted in a number of problems and concerns in Wisconsin.

First, there was the confused, top-down process followed by SCS in developing and implementing the current policy. Throughout this process the national SCS office paid little attention to input provided by LCCs, state agencies and local SCS staff on the development and approval of ACS's. Consequently, the partnership between SCS and these agencies in Wisconsin has been strained and the morale of many SCS and cooperating agency staff has suffered.

Another problem involves the technical, environmental and economic implications of ACS's, which are now sanctioning soil erosion rates that are well above T levels (4T to 5T in some cases) and conflict with other federal, state and local conservation programs that are intended to control erosion and reduce its off-site damages. For example, there now exists a double standard between Wisconsin's farmland preservation conservation compliance program which requires farmers to achieve T or near-T levels of erosion on cropland in exchange for special tax credits and the federal conservation compliance program--both of which affect many of the same farmers. Additionally the "carrot and stick" incentive for farmers to enroll highly erodible cropland into the conservation reserve program has been reduced and future signups for this program are expected to suffer as a result.

The timing of this policy shift is another problem that must be noted. It has indeed been disheartening for conservationists, who have made good faith efforts to inform farmers about conservation compliance, to watch the standards relaxed and their professional credibility undermined so early and so significantly in the compliance timetable established by the 1985 Food Security Act. Under conservation compliance, farmers need only to have an approved conservation plan by 1990. These plans need not be implemented until 1995. If after 1990 it becomes clear that economic hardship will result from strict implementation of conservation plans, then that would be the appropriate time to provide needed flexibility or ACS's.

A final problem with this policy is the signal it is sending to farmers about conservation policies and land stewardship. Conservationists have worked for years to educate farmers about the importance of reducing soil erosion to T or near-T levels in order to maintain soil productivity. At the same time, conservationists have worked to instill in farmers a sense of stewardship or "land ethic." But the current policy is switching the signals on both soil productivity and land stewardship. In a very real way, this policy is sending the signal that soil erosion is not a serious problem. For example, in Green County Wisconsin, the majority of farmers are now requesting ACS's without even giving consideration to basic conservation systems that would achieve T levels. In their defense, SCS officials have attempted to discredit T levels rather than admit their mistake on this issue. Yet it is clear that if there is a technical problem with T levels, it is that they are probably too high to actually maintain the productivity of many highly erodible soils.

Despite these problems, it is now clear that we cannot turn the clock back on ACS's. Rather, we must look ahead and take steps to constructively meet the challenges raised by this experience.

The first challenge is to analyze the impact of ACS's--both in terms of soil erosion and water quality. This should include collecting and analyzing data at the state and county level on the number of farmers adopting ACS's versus basic T-value systems, the amount and location of acreage affected, the relative erosion rates, and the off-site, water quality implications. Although SCS has begun to analyze some of these issues it is critical that such analysis be objective and take into account the broadest possible considerations. We need to know what the impact of ACS's will be in Green County, where so many farmers are now requesting them. Additionally, there should be an effort to gauge the impact of ACS's on state and local conservation and water quality programs, as well as on enrollment in the conservation reserve. The ideal situation would be to analyze these issues in cooperation with the Soil and Water Conservation Society and the National Association of Conservation Districts for the purpose of developing specific policy reforms for the 1990 farm bill.

The second challenge is to establish a new partnership between SCS, state agencies and conservation districts for standard setting and the approval of management practices in the context of today's quasi-regulatory programs.

It is now clear that the 1985 Food Security Act dramatically changed the forces driving soil and water conservation policy and disrupted the traditional agency roles and cooperative relationships. Under the old system of voluntary but often ineffective soil and water conservation programs, it was easy to maintain the same technical standards for all agencies and programs because no penalty or economic hardship would result if a farmer chose not to participate. Today, however, that is no longer the case and it is reasonable to expect the strict standards established for voluntary programs will be modified even further as these new quasi-regulatory programs are implemented. But the decision-making process used in setting standards and coordinating programs has been a major problem with ACS's and is likely to be repeated as best management practices for water quality are developed by the various state and federal agencies now working on strategies to address nonpoint source water pollution.

To head off such problems in the future, a well defined legal process must be established for approving technical standards and acceptable management practices for inclusion in the SCS Field Office Technical Guides and for maintaining program eligibility. Ideally, such a process would take place at the state level and provide for meaningful input by state and local agencies and the general public and improve coordination and consistency between state and federal conservation and water quality programs.

Specifically, I suggest the formal establishment of state level conservation technical committees consisting of representatives from SCS, ASCS, Extension Service, state soil conservation and water quality agencies, conservation districts, and farm and environmental organizations. Once established, such technical committees would be granted authority, subject to SCS regional technical center review, to establish and approve standards for inclusion in the SCS Field Office Technical Guides. Of course, there should also be a requirement that public hearings be held on major technical or program eligibility issues like ACS's or best management practices for water quality. This type of process would lend increased credibility to the use of SCS Field Office Technical Guides for conservation compliance and other programs. But perhaps more importantly, it would recognize and constructively utilize the significant commitment and technical expertise that exists outside SCS in state and local agencies and in other agricultural and conservation organizations. I believe the keen and growing public interest in soil conservation and water quality demands an open, legally established process for standard development and approval--a process that is driven by cooperation, innovation, reason and consensus rather than by federal agency mandates. I urge you to support the establishment of such a process either through administrative action or in the 1990 farm bill.

In conclusion, the 1985 Food Security Act has been a great step forward on the path of conservation. But ACS's have been a setback to this progress. On balance, however, the outlook is still positive--provided there are no more setbacks of this kind.

It is my hope that we can learn from this experience, analyze the implications of ACS's, establish a new partnership for setting technical standards and make additional progress in the 1990 farm bill.

Thank you for the opportunity to appear before you. I would be happy to answer any questions.

(Attachments follow:)

» *If we allow complacency and bad policies to get the best of us, our hard-won conservation gains will become little more than lost opportunities.*

VIEWPOINT

Alternative conservation systems: Controlling the damage

CONSERVATIONISTS' hopes were raised when the 1985 Food Security Act became law. Finally, after 50 years of voluntary programs, there would be an effective national soil and water conservation policy. No longer would federal farm policies encourage conservation on the one hand and soil erosion and wetland destruction on the other. Even the administration seemed supportive.

But now the administration is backing off on conservation compliance. After prolonged debate, the *Federal Register* of February 11, 1988, carried final regulations on use of "alternative conservation systems" in Soil Conservation Service field office technical guides for planning to meet compliance requirements. The new regulations allow conservation practices that do not reduce erosion to tolerable (T) levels to be used in meeting compliance requirements.

SCS originally indicated that alternative conservation systems would be developed, using local input, for only a few soil types and cropping systems; a substantial reduction in erosion from the status quo would thus be achieved. In fact, discussion in the *Federal Register* stated that there would be nondegradation on about 85 percent of the highly erodible cropland subject to compliance and that alternative conservation systems would be reviewed by local agricultural and conservation groups, presumably before approval by SCS. Though many conservationists expressed reservations about this approach, economic and political concerns had to be balanced in the Food Security Act's implementation.

But since the final regulations on alternative conservation systems were issued, the policy has continued to evolve, both formally and informally. On May 3, 1988, SCS Chief Wilson Scaling issued a bulletin "to set forth the policy on the use of alternative conservation systems for compliance on highly erodible land." This bulletin required action by June 15, 1988, and modified earlier SCS policies by stating that alternative conservation systems, with no reference to T, would be developed by SCS for all highly erodible soils and included in all field office technical guides where there is highly erodible land subject to compliance. This bulletin essentially directs SCS state conservationists to approve alternative conservation systems for all highly erodible land, whether necessary or not for economic reasons.

From the beginning, there has been no formal policy on the degree of erosion that would be allowed under alternative conservation systems. Although the regulations state that the "conservation systems in the field office technical

guide are designed to achieve substantial reductions in soil erosion," there is no definition of what this means. Consequently, there has been concern and confusion about the natural resource implications of these systems. However, it is now clear that SCS is relying mainly on C x P factors—(cover and management) x (erosion control practice)—from the universal soil loss equation to establish alternative conservation systems. Regrettably, the result may be the sanctioning of severe soil erosion on some fragile soils—land that should never have been farmed to begin with and that could be enrolled in the conservation reserve. In fact, soil losses of 4T to 5T may be allowed on some soils in Wisconsin, and the allowable losses may be even higher in other states. This begs the question: Are these really alternative conservation systems, or a rationalization of business as usual?

The problems with this policy and the way it has been administered are significant and no doubt will haunt soil conservation efforts for years to come. They include:

- ▶ Alternative conservation systems may be needed to prevent economic hardship, but there has been no attempt to use explicit economic criteria in their development.

- ▶ Local input by agricultural and soil conservation groups in the development of alternative conservation systems has been replaced with a top-down mandate by SCS.

- ▶ Conservation compliance may become a "paper tiger" that does little to address severe soil erosion problems.

- ▶ There will be less incentive for land to be enrolled in the conservation reserve.

- ▶ SCS, cooperating agencies, and conservation districts may lose credibility with the people they serve because of the mixed messages they have received and sent, which could spell disaster for these institutions in the future.

- ▶ SCS and conservation districts will have to modify conservation plans to incorporate alternative conservation systems, which will add to the severe workload problem.

- ▶ The partnership between SCS and conservation districts will be strained and may even shatter if programs and standards are incompatible and if memoranda of understanding between SCS and districts are challenged.

- ▶ The morale of many SCS and cooperating agency staff people, already low because of the administration's attempts over the years to eliminate SCS and other conservation programs, may drop to a new, unprecedented low.

Conservationists must work together to control the damage this policy could do to our natural resources and conservation institutions. We must ask the administration to reconsider the policy and use the T standard wherever feasible economically. And we must launch a concerted effort to strengthen and expand the basic laws that established conservation compliance and the other conservation provisions of the Food Security Act. If we allow complacency and bad policies to get the best of us, our hard-won conservation gains will become little more than lost opportunities.

Glenn M. Stoddard

Glenn M. Stoddard is executive director of the Wisconsin Land Conservation Association, 308 Agriculture Hall, 1450 Linden Drive, Madison, 53706.

WISCONSIN
LAND CONSERVATION
ASSOCIATION

REQUESTING THE SCS TO REVISE ITS POLICY ON ALTERNATIVE CONSERVATION SYSTEMS TO: (1) PROVIDE FOR LOCAL APPROVAL OF ALTERNATIVE CONSERVATION SYSTEMS; (2) ASSURE CONSISTENCY WITH STATE AND LOCAL CONSERVATION POLICIES; AND (3) USE TOLERABLE SOIL LOSS RATES (T-VALUES) AS THE FUNDAMENTAL STANDARD FOR ALL CONSERVATION PLANS EXCEPT IN SPECIAL EXCEPTIONS BASED ON ECONOMIC HARDSHIP

WHEREAS, the USDA Soil Conservation Service has set forth a policy that Alternative Conservation Systems (ACS), which may allow severe soil erosion, shall be made available to all producers farming highly erodible land subject to conservation compliance under the 1985 Food Security Act; and

WHEREAS, ACS have been developed with inadequate local input and conflict with state and local conservation policies to control severe soil erosion and nonpoint source water pollution; and

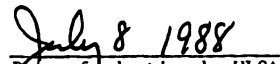
WHEREAS, ACS will reduce the credibility of conservation officials and programs and create confusion among farmers about acceptable soil and water conservation practices; and

WHEREAS, the current policy does not provide for local approval of ACS and thereby violates the intent of the Memoranda of Understanding between the Soil Conservation Service and conservation districts.

NOW THEREFORE BE IT RESOLVED that the Soil Conservation Service revise its policy on ACS to: (1) provide local approval of ACS; (2) assure consistency with state and local conservation policies; and (3) use tolerable soil loss rates (T-values) as the fundamental standard for all conservation plans except in special exceptions based on economic hardship.



WLCA President



Date of Adoption by WLCA
Board of Directors

Senator HARKIN. Thank you very much, Mr. Stoddard.
Mr. Cline.

**STATEMENT OF LLOYD CLINE, COTTON AND GRAIN FARMER,
PAST PRESIDENT, NATIONAL COTTON COUNCIL, LAMESA, TX**

Mr. CLINE. Mr. Chairman, my name is Lloyd Cline and I am a cotton and grain farmer from Lamesa, Texas. I also am actively engaged in the management of a rural agricultural bank in Lamesa, where I spent about 40 years of my life, along with my farming operation. I am here today to present testimony on behalf of the National Cotton Council of America, which is the central organization of the raw cotton industry.

I am also honored to have been asked by, and to include in my remarks some of the National Association of Wheat Growers comments. Our associations have worked closely together, especially on conservation compliance matters, and other matters. And I believe they will submit written testimony that is more specific than I'll be able to give concerning some of their problems.

We do appreciate this opportunity to talk about the conservation compliance, and offer testimony in this manner, that's required by the Food Security Act of 1985.

The farm act addresses several different conservation issues: wetlands, highly erodible land, and conservation compliance for farms with highly erodible land which requires the submission of an approved conservation plan for each farm by 1990.

The farm law also authorizes conservation reserve programs to allow the Federal Government to encourage the retirement of land classified as highly erodible.

The majority of my comments this morning will be devoted to the conservation compliance provision. As with any program, the promulgation of the regulations and the subsequent administration of those regulations are critically important to farmers.

The major challenge facing USDA's Soil Conservation Service was to establish reasonable standards for erosion reduction. Initially the standards were based on the textbook standards of the Soil Conservation Service known as T values. However, the weight of public comments on the initial, proposed standards convinced USDA that use of a stringent, rigid standard of T could jeopardize production agriculture in many parts of the country. It had become obvious that the use of the standard based on T value would either require taking large, productive tracts of land out of production, or producers would incur tremendous expenses to make the farm eligible for farm program benefits.

We in the cotton industry are highly supportive of SCS's ultimate decision to implement a more pragmatic, flexible program based on the local field office Technical Guide. The systems proposed in the Technical Guide have been revised and reviewed at the national and local levels and offer farmers an opportunity to achieve significant improvement in erosion rates utilizing economical and technically feasible techniques. This approach certainly does not mean business as usual out on the farm, but does fulfill congressional intent that soil erosion be significantly reduced in a way that is not economically devastating to the family farmer. We

believe the use of the field office Technical Guide rather than T values closely follows the sentiment of the House-Senate Conference Report on the Food Security Act of 1985. The report calls for the Secretary to apply standards based on experienced technical judgment of local professional soil conservationists, who would take into account not only the physical aspects of erosion, but also the economic consequences of the measures to be included in the conservation plans prepared under this provision.

For those who would argue that SCS has abandoned the intent of the law by moving away from the use of T values, I would emphasize that the measurement of the soil loss is not an exact science. For example, a measurement of a 10-ton-per-acre soil loss may actually be 5 to 15 tons, or 3 to 18 tons. With such acknowledged variance, the utilization of inflexible standards would not be practical, nor would it be fair.

An excellent example of the need for flexibility in the development of a conservation compliance system can be found in the cotton production area around Lubbock, Texas, an area where the value of the annual cotton production is in excess of \$1 billion. It is estimated that between 60 and 75 percent of the cotton land in Texas is classified as highly erodible. The use of alternative systems developed in consultations between SCS and the farmer allow employment of a combination of crop rotation, tillage, terracing, contour farming, and other practices which substantially reduce erosion. These options can be expensive and represent radical departure from the status quo, but at least producers who have very limited crop alternatives, such as they have in the high plains of Texas can continue to farm. The use of T value determinations, on the other hand, would allow such limited options—given today's technology—that large portions of land could not be farmed.

The timetable set for USDA, and for farmers, to establish conservation plans by 1990 is a very ambitious program. The time required for SCS representatives to design a custom plan for every highly erodible field on every farm is enormous. Therefore, the use of generic plans for farms with similar soils within a given area will be extremely important.

Mr. Chairman, the use of the technical field guide and economic considerations, coupled with the employment of alternative conservation compliance systems have resulted in significant progress toward the goals embodied in the 1985 farm act.

We believe it is important to maintain consistency in the rules until the required plans can be completed, and we can more objectively evaluate the progress and establish long-term objectives. We believe any significant change in the USDA's current implementation policy would result in confusion and will hinder the potential for real progress in reducing soil erosion.

Mr. Chairman, in conclusion allow me to mention that the wheat producers are experiencing some problems with the already overly stringent enforcement of the wetlands provision. And they're addressing that in their written statement, I understand, and have given you some specific recommendations as to what they would like.

I certainly appreciate the opportunity to be here today and to share the Cotton Council and the National Association of Wheat Growers concerns in this matter.

[The prepared statement of Mr. Cline follows:]

Statement of Lloyd Cline
before the
Subcommittee on Nutrition & Investigations
of the
Senate Committee on Agriculture, Nutrition & Forestry
October 4, 1988

Mr. Chairman and members of the subcommittee, my name is Lloyd Cline, and I operate a cotton and grain farm near Lamesa, Texas. I am also actively involved in the management of a rural bank in Lamesa. My testimony is presented on behalf of the National Cotton Council of America which is the central organization of the raw cotton industry representing farmers ginners, warehousemen merchants cottonseed crushers, cotton cooperatives, and cotton textile manufacturers

Mr. Chairman, I am also honored to have been asked to include comments on behalf of the National Association of Wheat Growers. Our organizations have worked closely on matters of mutual concern - especially conservation compliance. Since I am not an expert in some of the special situations in wheat producing areas, I am certain the Wheat Growers Association will submit more detailed, written comments for the record.

We appreciate this opportunity to present the views of cotton and wheat producers on the implementation and administration of the conservation compliance provisions required by the 1985 Food Security Act. We have, in fact, presented testimony on this important matter on three previous occasions before House and Senate Agriculture Subcommittees. Obviously, since our respective members depend on the productivity of the land, cotton and grain farmers are acutely aware of the need to employ good conservation practices. The Congress through Title XII of the Food Security Act has expressed its strong interest in one of our most valuable resources - land - by linking eligibility for federal farm program benefits with conservation practices.

In fact, the 1985 farm law addressed several different conservation issues wetlands (or swampbuster), highly erodible land (or sodbuster) and conservation compliance for farms with highly erodible land which requires submission of an approved conservation plan for each farm by 1990. In addition, the farm law authorized a Conservation Reserve Program to allow the federal government to encourage retirement of land classified as highly erodible.

The majority of my comments will be devoted to the conservation compliance provisions. As with any program the promulgation of regulations and the subsequent administration of those regulations are critically important

The major challenge facing USDA's Soil Conservation Service was to establish reasonable standards for erosion reduction. Initially the standards were based on the "textbook" standards of the Soil Conservation Service known as "T" values. However, the weight of public comments on the initial proposed standards convinced USDA that use of a stringent, rigid standard of "T" could jeopardize production agriculture in many parts of the country. It became obvious that the

use of a standard based on "T" value would either require taking large, productive tracts of land out of production or producers would incur excessively high capital investment costs to remain eligible for farm program benefits.

We are highly supportive of SCS's ultimate decision to implement a more pragmatic flexible program based on local Field Office Technical Guide. The systems proposed in the guide have been reviewed at the national and local levels and offer farmers an opportunity to achieve significant improvement in erosion rates utilizing economical and technically feasible techniques. This approach certainly does not mean "business as usual" but does fulfill Congressional intent that soil erosion be significantly reduced in a way that is not economically devastating to the family farmer. We believe the use of the Field Office Technical Guide rather than "T" values closely follows the sentiment of the House-Senate Conference Report on the 1985 Food Security Act. The report calls for the Secretary to apply standards based on experienced technical judgement of local professional soil conservationists who would take into account not only the physical aspects of erosion but also the economic consequences of the measures to be included in conservation plans prepared under this provision.

For those who would argue that SCS has abandoned the intent of the law by moving away from use of "T" values I would emphasize that the measurement of soil loss is not an exact science. For example a measurement of a 10 ton per acre soil loss may actually be 5-15 tons or 3-18 tons. With such acknowledged variance, the utilization of inflexible standards would not be practical or fair.

An excellent example of the need for flexibility in developing a conservation compliance system can be found in the cotton production area around Lubbock, Texas an area where the value of annual cotton production is in excess of \$1 billion. It is estimated that between 60 and 75 percent of the cotton land in Texas is classified as highly erodible. The use of alternative systems developed in consultations between SCS and the farmer allow employment of a combination of crop rotation, tillage, terracing, contour farming and other practices which substantially reduce erosion. These options can be expensive and represent radical departure from status quo, but at least producers who have very limited crop alternatives can continue to farm. I understand the wheat producing Palouse region of Eastern Washington and Northwest Idaho is a fertile but hilly area and is another prime example of the need for flexible standards for erosion control. The use of "T" value determinations, on the other hand would allow such limited options - given today's technology - that large portions of land could not be farmed.

It should also be noted that Texas cotton farmers have enrolled significant acreage in the CRP but additional enrollment will be limited as producers reach their individual payment limitation and many countries have reached their maximum acreage. Therefore the allowance of flexible conservation compliance practices becomes more critical as producers' alternatives are more limited.

The timetable set for USDA, and for farmers, to establish conservation plans by 1990 is very ambitious. The time required for SCS representatives to design a custom plan for every highly erodible

field on every farm is enormous. Therefore, the use of "generic" plans for farms with similar soils within a given area will be extremely important. This use of alternative conservation systems for farmers with similar conditions is not a dilution of the intent of the original act. It still requires significant adjustments to farming techniques and often can involve the utilization of new equipment and cultural practices. The alternative systems simply offer farmers a larger variety of options to achieve significant erosion reduction. These alternative systems also help "even-out" the requirements for farmers with similar soil types by packaging plans which can be used as guidelines by local agents. This promotes equitable treatment by guiding local SCS officials' interpretations of compliance requirements.

Mr. Chairman, the use of technical field guide and economic considerations coupled with employment of Alternative Conservation Compliance Systems have resulted in significant progress towards the goals embodied in the 1985 farm law.

We believe it is important to maintain consistency in the rules until the required plans can be completed and we can more objectively evaluate the progress and establish long-term objectives. We believe any significant change in USDA's current implementation policy will result in confusion and will hinder the potential for real progress in reducing soil erosion. The penalties are severe and the possibility of eliminating production on large tracts of land because of unattainable standards would be a mistake. In fact, many producers would simply choose not to participate in federal farm programs. In addition, we urge careful evaluation of the need for stepped-up research and development of cultural and technical applications to assist farmers in meeting the objectives of the conservation title of the 1985 farm law.

Mr. Chairman, in conclusion allow me to mention that the wheat producers are experiencing problems with overly stringent enforcement of the "wetlands" provision. Simply stated many farmers are being prevented from employing efficient cultural practices because their fields contain small areas which do not drain properly but are obviously too small to sustain wildlife. We believe the current definitions and procedures could result in conversion of productive farmland to wetlands rather than simply protecting existing wetlands. The written statement submitted by the Wheat Association includes specific recommendations which we urge you and your colleagues to consider.

Thank you for the opportunity to appear today.

Senator HARKIN. Mr. Cline, thank you very much for being here, and for your testimony. I'll start with Mr. Gulliford.

To the best of your knowledge was the Soil Conservation Service in Iowa contacted by Mr. Scaling's office prior to the May 3 memo that was sent out?

Mr. GULLIFORD. I have no knowledge of whether the Soil Conservation Service offices were contacted. I can assure you that my office was not, nor, to my knowledge, again, were any soil and water conservation districts contacted.

Senator HARKIN. There are a lot of things I want to ask questions about but don't have time for.

What is your background, Mr. Gulliford?

Mr. GULLIFORD. I've been a director of the division of soil conservation for almost 7 years. My training is in natural resource management, in agronomy. My major was in forestry; my minor was in soil science.

Senator HARKIN. And you work a lot with soil conservation?

Mr. GULLIFORD. Yes.

Senator HARKIN. For how long?

Mr. GULLIFORD. For 7 years, I've worked with soil and water conservation districts.

Senator HARKIN. What's the validity of the soil loss tolerance levels?

Mr. GULLIFORD. T is—the concept of tolerable soil loss has been upheld for years. It's been the practicing tool for soil and water conservation districts.

Clearly, we heard earlier today that it is the basis for conservation planning with respect to sodbuster. How can it be valid for sodbuster, if it's not valid for conservation compliance?

In the State of Iowa, in 1983, in a soil loss complaint, as part of our erosion control law that you discussed earlier, the defendant argued against the district's use of the universal soil loss equation to predict soil loss, and T as a basis for the compliance level required.

And the District Court for Dallas County affirmed that there is a scientific basis for T, based on testimony they heard from Iowa State University researchers and SCS professional staff.

It also affirmed that the universal soil loss equation is a valid way to predict average annual soil loss. It does estimate it, but it's the best working tool of the professional soil scientists.

Senator HARKIN. When Mr. Scaling testified, he said that for every person that believes in T values, there's another person that doesn't.

Now, I want to ask you again, through your association with SCS professionals, you say the T values are universally accepted? Now, again, I'm talking about people that are experts in this business, the soil conservationists.

Would you say that for every one, there's one that doesn't believe in it? How would you characterize it?

Mr. GULLIFORD. I would not say that at all. I would not characterize it that way. I would say that the professional soil scientist that's been working in the field has utilized the concept of the universal soil loss equation, and the concept of tolerable soil loss limits, in their work throughout their entire careers.

Senator HARKIN. Mr. Scaling says that this T level is entirely arbitrary. Is there any scientific basis for the T level? Has it been developed through scientific testing and experimentation over the years?

Mr. GULLIFORD. Tolerable soil loss concepts were developed in the universities and in the Department of Agriculture as the best—as a part of the work to produce the universal soil loss equation.

And I would agree with Mr. Stoddard that if you really looked at the concept of T—tolerable soil loss—that the established T levels have been generously established, rather than conservatively established, for many of our soil types.

I guess I would look at, for example, the loess hill soil types of Western Iowa. And if there is a place where the T values may be low in terms of the concept of tolerable soil loss to protect soil productivity, that would be one area where perhaps T levels are low.

Senator HARKIN. Just out of curiosity, why is that?

Mr. GULLIFORD. Because the loess hills were established geologically by windblown soil deposits there in places 20, 40, even 80 feet thick, that if all you're looking at is the productivity of the soil, you can lose a lot of that soil. And the parent material is very productive.

Now that doesn't do anything for the impact of where that soil goes once it's lost. If you look at the off-site impacts, they're certainly as severe.

Senator HARKIN. What has been the practical impact of the May 3 directive in the State of Iowa? What has happened to your people?

You testified a little bit earlier that the May 3 National Bulletin No. 180-8-31 created immediate problems. What kind of problems are happening because of that bulletin? Tell me, what are you finding?

Mr. GULLIFORD. First of all, it changed the planning standard that conservation districts and field office professionals were using.

Those people feel their credibility is damaged. Because they've got to work with that landowner every day. They sold the program on the basis that it was going to be firm, the deadlines were firm. The conservation compliance requirements would not change.

The reason they did that is because that's what we were hearing from Washington.

Senator HARKIN. Well, Mr. Gulliford, you were here this morning when Mr. Scaling was testifying. I asked him, is the language of the June 29, 1987 directive subsumed within the bulletin of May 3 of this year, and he said yes.

I said, in other words, nothing has changed? He said, no. So now, what do you make of that? Can't you now go back to Iowa and tell the people there that the 1987 directive is still intact. That it was just a misinterpretation.

Mr. GULLIFORD. I don't believe I can do that.

Senator HARKIN. Why not? You just heard him say it here today.

Mr. GULLIFORD. We felt that we were clearly within the June 1987 guidelines. Because we had looked at economic criteria. And we developed conservation systems in accordance with that economic criteria.

SCS in Iowa was clearly told by virtue of the May directive, as well as the, apparently, the discussions that took place around it, that the alternative conservation systems we were using in Iowa were not acceptable.

Senator HARKIN. Has that message ever been sent to you directly from SCS here in Washington?

Mr. GULLIFORD. Yes, I've been told—not mailed; I've been told in discussions—that to go back to where we were is not a negotiable issue.

Senator HARKIN. Who told you that?

Mr. GULLIFORD. USDA SCS employee.

Senator HARKIN. Who is the head of the State SCS office in Iowa?

Mr. GULLIFORD. In Iowa, it's Mike Nethery.

Senator HARKIN. Mike Nethery. I assume that's where it came from, right?

Mr. GULLIFORD. No, Mike has been told exactly the same thing. That's why the second set of alternatives—

Senator HARKIN. Did you listen to Mr. Scaling here this morning?

Mr. GULLIFORD. Yes, I did.

Senator HARKIN. What did you make of what he said? Didn't I just correctly repeat to you what he told me?

Mr. GULLIFORD. What I would make of it, is that we obviously—well, I shouldn't say obviously; it appears to me—that we apparently were one of the six or seven States that was not adhering to the initial policy, because Iowa was clearly told that we had to change the alternative conservation system.

It was not negotiable. The changing was not negotiated with either us or districts. It was articulated to the field offices through an SCS directive from the State office to the local field offices.

There was no discussion of what it should be. There was no interaction with State or local people. It was established by SCS and communicated to the field offices.

Senator HARKIN. Well, it would seem to me on the basis of what Mr. Scaling said this morning that this is a misinterpretation; that the director of the SCS office in Iowa can go right back to the June 1987 rule and continue to implement that, because that's what he said or has my hearing gone bad? I heard him say that, sitting right where you're sitting.

Mr. GULLIFORD. I will certainly recommend that to him. But I would be surprised if he would change. Because it's going to have to come from SCS in Washington before they will change that position.

Senator HARKIN. I want to get the transcript of this hearing, as soon as we can get it from the reporter. And I think we ought to get my question to Mr. Scaling, and we'll get the answer that Mr. Scaling gave, and then we ought to send that out to the State SCS offices, and just let them see what he said; that the June 1987 rule is still in effect, period. That's what he said.

Under the June 1987 rule you can go right ahead with the same kind of T levels and adherence to requirements as you had before. Somehow, I've got to get to the bottom of this. All I've gotten so far is what I've been reading in the rules and directives.

I don't know what conversations went on. But the record will show what he said.

I asked: Is the June 1987 language subsumed in that May 3 directive? He said yes. I said, so then the requirements of June 1987, are still in effect? And he said yes. And the record will show that.

So based on what Mr. Scaling said today it appears that there has been some misinterpretation on this, and that we can go right back to where we were before the May 3 bulletin. And if you can't, and if a State SCS director says, I can't, I may have to call Mr. Scaling back up here again.

We may have to put people under oath. But I'm going to get to the bottom of this.

We can't have two conflicting versions being offered to this subcommittee, and have them both stand. We can't. One's real, one's true, and one's not.

Well, anyway, I'm not taking it out on you, Mr. Gulliford. I'm just saying that I'm frustrated by this.

Mr. GULLIFORD. I stand by my testimony.

Senator HARKIN. I know that. I am just frustrated by this. Now, as I said to Mr. Scaling, credibility really is based a lot on consistency, and you point to that in your testimony. You said that the success we had in our initial efforts to implement conservation compliance within a strict time frame came from total Statewide commitment to the concepts that the program is for real, the deadline is firm, and the compliance level required will not change.

Mr. Scaling said this morning, the deadline is real, it will not be moved. He says the compliance level requirement has not changed.

Mr. GULLIFORD. The compliance level changed in Iowa following the May 3 directive.

Senator HARKIN. Well, then maybe we ought to have Mr. Nethery here in order to ask him why he changed. What was it that prompted him? Maybe the next panel can help me. There is something I am not understanding.

Is there something I am not understanding about this, Mr. Gulliford? Or am I just pointing out something that needs to be settled?

Mr. GULLIFORD. Well, I think that there are inconsistencies because clearly, we felt we were implementing the program within the guidelines. As I indicated, we did not expect to get the 85 percent, given the alternative conservation systems we had implemented, but we did expect to get T where it was technically and economically feasible.

Senator HARKIN. Which is what the 1987 directive asked you to do.

Mr. GULLIFORD. I agree. Exactly.

Senator HARKIN. And that is what he says is still in effect. Obviously there was a change in Iowa after that May 3 bulletin. I want to find out why there was a change, if, in fact, Mr. Scaling said this morning that it did not change anything.

There is some inconsistency here, and I have to get to the bottom of it.

You said State and local conservation partners should have been consulted on this issue. Mr. Scaling says they were. He said he did consult with States, including States outside of the six or seven that were affected.

But Iowa, as far you know, was not consulted?

Mr. GULLIFORD. To my knowledge—well, no one contacted me. We were just told what the new compliance requirements would be.

Senator HARKIN. And you had received no complaints on the June 1987 rule? That is what you said, right?

Mr. GULLIFORD. Prior to the May bulletin—again, through June, we had had no landowners come to us saying the task is too difficult.

Senator HARKIN. Have you had any farmers since that May bulletin come in asking for revisions?

Mr. GULLIFORD. The districts are beginning, now, to face that issue. As Mr. Scaling indicated, the success of the program is the ability for the field office staff to sit across the table from a farmer, and for there to be trust and communication, and understanding of issues.

Well, the field office personnel feel that if the compliance requirements have changed, the only way they are going to maintain trust with those people is to go back and inform them, that, indeed, the compliance requirements have changed.

Because the next time they face those people, the credibility is going to be gone if they are not communicating totally with them.

Senator HARKIN. I want that transcript tomorrow, and I want to get Mr. Scaling's answer and then if necessary get Mr. Nethery on the phone to read him what Mr. Scaling said and ask him if he is going to change that State office directive in Iowa. And if not, I want to know why not. Thank you very much, Mr. Gulliford.

Mr. Durban, you said on page 3 of your testimony, "We have several States with laws that call for erosion on cropland to be reduced to "T" levels at some time in the near future, such as Iowa's "T by 2000" program."

You further state: "I believe that conservation compliance does not destroy the ability of states to establish stricter standards. In fact, I believe that compliance actually provides opportunities for state and local programs that did not exist before 1985."

But as I brought out today, the May 3 bulletin basically is telling States that they cannot require anything stricter than what SCS in Washington requires.

Mr. DURBAN. Yes, Mr. Chairman, and my reference to that is that the Federal program suggests that States cannot be more strict than the Federal requirements for Federal programs.

A State can still do whatever they desire, whatever their State law suggests, and it can still ask for technical assistance from the Soil Conservation Service to implement their own program.

Now the problem that I recognize is that by Federal directive SCS has been directed that they will exert all energies toward the implementation of FSA.

Therefore, with a limited number of personnel, then the State program, because SCS is a Federal agency, may suffer from technical assistance to implement their more stringent requirements.

I see a difference in those two programs.

Senator HARKIN. Mr. Durban, you have been in conservation a long time.

Mr. DURBAN. Twenty-seven years.

Senator HARKIN. Twenty-seven years. What do you think about this T value? Is that just an arbitrary standard?

Mr. DURBAN. As a district supervisor for 27 years, and having had four different district conservationists in my district, having had technical assistance and other persons in that same office, in every case I expected them to suggest to me T levels, and what the ultimate was.

I assumed at that time that that was the technical expertise that was suggested, and that that was an exact science. I found out since, that is not an exact science. However, in talking with folks like Jim, and many others, it most certainly is a guide that I, as a farmer, I, as a district supervisor, look to that guide as to what the erosion rate is on my farm.

Whether I weigh above, or weigh below what the average, and what should be happening there.

From that standpoint, I put a lot of trust and faith in that T value, as a layman.

Senator HARKIN. Well, Mr. Scaling says it is arbitrary.

Now arbitrary is a specific term in the language, and I would say that when something is arbitrary it has no basis in science or experimental results, or it cannot be tested to prove its validity or has not been tested to prove its validity.

You are saying that the T values—while not an exact science, and I do not know that anyone has ever proclaimed that they were—do at least have some validity in terms of experience levels, scientific basis, and testing basis.

And so therefore it cannot be arbitrary. It may not be an exact science, but not arbitrary.

Mr. DURBAN. Well, I guess I would have to respond to that in this manner. I think it has always been arbitrary. Before the 1985 farm legislation, when plans were planned on my land I could choose to meet the T level, or I could do something less than that, if that was my desire.

Therefore, I think it made it an arbitrary thing. My farm plan was approved, whether I chose the T level suggestion.

Senator HARKIN. The approval was arbitrary. I am just talking about the T level that was established. SCS personnel did not come to you and say, "Well, here is the T value. Now you do not like that? OK. Here is another T value." They did not say that.

Mr. DURBAN. The T value met my land specifications.

Senator HARKIN. All right. You also said: "But continued bickering over which approach is best will not protect our resources." What do you mean by this bickering? What is happening here today, or—

Mr. DURBAN. No, sir. But obviously I get letters from all over the United States, as I am sure you have, in regard to this.

Senator HARKIN. Sure.

Mr. DURBAN. I would suggest that there are certain sections of the country that are more concerned with the bulletin of May 3 that we referred to. But I think if we continue to attempt to find a better way to right a mistake that was made—and I believe that it was a mistake—then we are going to simply turn off more farmers than we are going to get involved in the program.

I can see that in my own local district level, and we have conservation compliance plans, right now, that the district board is not approving with signature. They are not conservation plans. They are compliance plans.

We had folks that came in early, and had a conservation plan that would meet the compliance requirements. Suddenly, if we now go back—and some of those folks have come in and ask for the less restrictive program because they do not know what is coming in 1990 or 1995. They are going to take the easy way out in some cases.

If we were to go back now, and ask for those folks that have come in since May 3 or June 10—the June 10 issue is the date that I recall—and redo their plans, I think we have a tremendous credibility gap to fill, and I see a tremendous program coming in 1989 and 1990 with the Water Quality Act, where we have to do some things to get some practices on the land out there to meet those requirements.

And I just think it would have a tremendous—

Senator HARKIN. Here you are. You are the president of the NACD. On behalf of your conservation districts, are you saying that you would rather see the June 1987 rule remain in effect?

Mr. DURBAN. The latest revision, whatever we have now, whichever of those you were referring to, and I suggest that to June 10. Well, if that is when it got to me, was June 10. I realize it was dated May 3.

Senator HARKIN. Yes.

Mr. DURBAN. If we attempt to turn that around, and that is what my mail suggests to me from across the United States. There are certain areas, and I would suggest that probably the Corn Belt has more concern with the ACS's than anywhere else in the country except maybe in one or two instances, in maybe one district in North Dakota, which did a complete about-face, for whatever reason.

In being opposed to the original compliance measures that the district board had to approve, the Congress suggested, and we asked that they be involved in that. They did not want to do that because of the liability. Since then, they have said that the ACS's are working well, but we wanted to be involved in the decisions that were made.

Senator HARKIN. I want to get this straight. Mr. Durban, here is the Federal Register of Monday, June 29, 1987, Rules and Regulations.

Mr. DURBAN. OK.

Senator HARKIN. That is the rule that says that: "These revisions will have the effect of eliminating a rigid T standard for soil and crop situations where it is not economically or technically feasible or practical to achieve T." All right. Now, is this what you are saying that you want to remain in effect?

Mr. DURBAN. At the present time, yes.

Senator HARKIN. You want this to remain in effect?

Mr. DURBAN. Yes.

Senator HARKIN. Here is the May 3, 1988 bulletin that you referred to and that we have had a discussion about here all morning, with Mr. Scaling, and others.

Does this, in your opinion, change the June 29, 1987, rule?

Mr. DURBAN. Yes. It does. And I will retract what I said, because as I just indicated, I am getting dates confused with what you are saying.

Senator HARKIN. OK.

Mr. DURBAN. I am suggesting that the program that—the sheet that you now have in your hand——

Senator HARKIN. This is the May 3, 1988 bulletin.

Mr. DURBAN. Yes, sir. We believe that to change that, to go back to the original ACS there, that NACD and conservation districts support it across the United States, the original, right there.

Senator HARKIN. They support the June 1987 rule?

Mr. DURBAN. Absolutely. But to go back to that from the other issue, I think would be confusing to farmers, and to conservation districts across the country.

Senator HARKIN. Wait a minute. You are saying NACD supported, or still supports the June 1987 rule?

Mr. DURBAN. Yes, sir, where economically and technically feasible.

Senator HARKIN. But you say the May 3, 1988 bulletin changes that?

Mr. DURBAN. It changes that.

Senator HARKIN. But you say you do not want to go back to the June 1987 rule?

Mr. DURBAN. That is correct.

Senator HARKIN. You say let's stick with May 3, 1988 bulletin?

Mr. DURBAN. That is correct, because of the confusion that I just indicated.

Senator HARKIN. But if you support the June 1987 rule, why wouldn't you want to stick with it?

Mr. DURBAN. Because we are going to change a whole bunch of plans that have been made in my district based on this——

Senator HARKIN. Since June?

Mr. DURBAN. Yes, sir.

Senator HARKIN. July, August, September. In 3 months. This was in effect for a year.

Mr. DURBAN. Yes, sir.

Senator HARKIN. This May 3 bulletin has been in effect for 3 months.

Mr. DURBAN. Yes, sir.

Senator HARKIN. Now how about the effects on those that made those plans in that one year, Mr. Durban?

Mr. DURBAN. They have the opportunity, sir, to come back——

Senator HARKIN. Don't you think that causes confusion?

Mr. DURBAN. Yes, indeed it does, but there are not nearly as large a percentage in that bracket, that came in following the May 3, or whatever, in 1988, proposal that came down.

We have a much larger percentage that accepted the alternative conservation systems as they have been in effect since June 10.

That is the problem that I have on my own farm. It could have an effect. It will not, but I can most certainly see how it could.

I have a neighbor who was in early, one of the early conservationists, came in early and had a farm plan made. He sees the dif-

ference. He has not asked for a change yet. He changed his operation based on the early proposals.

Senator HARKIN. We have 38 percent of the plans completed in Iowa by June of 1988.

Mr. GULLIFORD. That is correct.

Senator HARKIN. Thirty-eight percent. How many more plans have been made from June to this September?

Mr. GULLIFORD. I cannot answer that. I can go back and—

Senator HARKIN. Well, it would have to be over 38 percent to surpass the plans completed under the June 1987 rule.

Mr. GULLIFORD. No. It has not been over 38 percent, additional, in those 3 months.

Senator HARKIN. How about Ohio? How many had completed their plans in Ohio prior to June? Do you know, Mr. Durban?

Mr. DURBAN. No, Mr. Chairman, I do not. I believe the figure that is completed now is something in the 65 to 68 percent, but to give you that figure in Ohio, sir, I cannot.

Senator HARKIN. You think it is 60 or 65 percent complete now?

Mr. DURBAN. Now? Yes.

Senator HARKIN. And by June you are saying that it would have been less than 30 percent? You are saying more have completed plans since June than did so in the whole year before?

Mr. DURBAN. Yes. In my local district, I know that that has been the case. I have seen the plans, and the names on the sheet when we have gone in for board meetings, and there is a tremendous difference.

Senator HARKIN. How many conservation districts are there in the United States?

Mr. DURBAN. About, say, 3,000.

Senator HARKIN. About 3,000?

Mr. DURBAN. 2,900 and some odd.

Senator HARKIN. I sure would like to know how many farmers had plans completed by June of 1988, and how many have completed them since then.

Now you correct me if I am wrong in this interpretation of what you are saying. NACD supported the June 1987 rule?

Mr. DURBAN. Yes.

Senator HARKIN. The May 3, 1988, bulletin came out, and changed that, but you supported the change. But you are saying that even though it changed it, you do not want to go back to the June 1987 rule?

Mr. DURBAN. I am sorry. We opposed it.

Senator HARKIN. You opposed—

Mr. DURBAN. The most recent change.

Senator HARKIN. You opposed the May 3 bulletin?

Mr. DURBAN. Yes, sir.

Senator HARKIN. But you say that you do not want to undo it, even though you opposed it?

Mr. DURBAN. That is correct.

Senator HARKIN. Because it will cause confusion?

Mr. DURBAN. That is correct.

Senator HARKIN. Forgetting about the confusion that is caused to the other people that signed up the year before?

Mr. DURBAN. Yes, sir.

Senator HARKIN. I just want to make sure I understand that. So you are saying let's just stick with the May 3 bulletin. But now, how do you take into account what Mr. Scaling said? He said that his bulletin does not change the June 1987 rule.

Mr. DURBAN. I have to disagree.

Senator HARKIN. Wait a minute. He is the head of SCS.

Mr. DURBAN. Well, I cannot help that.

Senator HARKIN. He signed the bulletin.

Mr. DURBAN. Yes, indeed, and he can sign and suggest what he cares to. As a farmer, as a district supervisor, and as president of the national association, I think that it did change what happened.

It relaxed the requirements to meet the compliance rules of the farm bill.

Senator HARKIN. Well, again, this is a conflict that we have here today. Yes, it does change the rules; no, it does not. Who is right, and who is wrong? Mr. Scaling said it does not change it. I have to take him at his word.

Now, shall I bring him up here and swear him under oath?

Mr. DURBAN. Sir, that is not my decision.

Senator HARKIN. Well, I am just asking that rhetorically. Maybe I will have to put him under oath. Then we will see if he would like to swear to what he has said today. As it is, I am taking people at their word here today.

All I am trying to do is get to the bottom of this because a lot of people are concerned about this situation, and there are problems out in the field with the conservation compliance rules, and if we are going to have a successful program we have to do something about it.

I am trying to figure out what is the best solution to do about it, and what you are saying is let's just stick with what we have right now.

Well, I will take that under advisement.

Mr. DURBAN. Well, the letters that I get, sir—and that is what I have to report here in this testimony—suggest that.

Senator HARKIN. I appreciate that. I am just frustrated by the conflicting interpretation in the testimony here today.

Mr. Stoddard, I would just ask you: Do you have any observations on the colloquiums I have just had with Mr. Gulliford and Mr. Durban?

Do you have any further thoughts on what we talked about?

Mr. STODDARD. Well, I agree that the May 3 memo changed things dramatically. In Wisconsin, for instance, we talked about whether we needed alternative conservation systems a full year before May, and we came to the conclusion that we really did not need them. That we could do the job and not put farmers out of business, and still get down to T levels.

Then after the regulations were changed, February 11, the word came out from SCS in Washington that we had to have some alternative conservation systems, and so we began to develop them for specific soil types and specific types of cropping systems where we expected some need for more flexibility.

As we were in that process—and I believe we were one of the last States to do that—the May 3 memo was issued, and the rules changed automatically at that time, and we were told that on all

highly erodible soils we would have to have alternative conservation systems.

From there on, dialog pretty much came to a halt. SCS developed these systems, sent them to their national technical centers for review and approval, and they came back to the State and they were put into the tech guides.

What was not clear was how SCS was choosing the levels of erosion that would be acceptable under those systems, but we heard rumors from SCS that there was unwritten guidance coming out of the national office that the alternative systems should not be too strict, and that there was sort of this weak threshold level of reduction in potential erosion.

And so now we have four different CP factors from the universal soil loss equation that are available, and depending on the erodibility of the land, erosion rates may get up four to five times the tolerable level.

So the May 3 memo did change things dramatically. I have to disagree with Mr. Scaling.

Senator HARKIN. And Mr. Cline, what say you? Do you think that the May 1988 bulletin changed the June 1987 rule?

Mr. CLINE. Mr. Chairman, I do not know if it changed it or not. I do not see that being a major piece of discussion in this meeting today. I am speaking as a dirt farmer. I get out there, I make my living on the farm, and I always have. I farm the land that my grandfather and great-grandfather farmed.

That land today is in better condition now than it was when I was a little child growing up. The U.S. Congress has passed a major piece of legislation. It drastically changed what the farmer does out there in the country. It is a step in the right direction.

Let's don't try to step all the way to the top of that mountain at one time. Let's take it time, and time, and give it some time, and work with it. I think we are moving in the right direction.

As I testified in my paper here, there is a great deal of cotton land across this United States of America that would be taken out of production if you require a strict adherence to what, quote, T value seems to be.

There is definitely a need for an alternative program for cotton producers, and as I have mentioned, particularly the high plains of Texas around the Lubbock area, where you have a tremendous amount of cotton produced, a crop in excess of \$1 billion.

It is the key crop in the high plains of Texas, and you take us out of business out there, and you take many other cotton producers out of business across the Cotton Belt, where there is no alternative crops, you have devastated those—

Senator HARKIN. Is that the alternative, Mr. Cline—either put farmers out of business, or have conservation? You are saying that to get down to sustainable soil loss levels—within the T level—would put them out of business, right?

Mr. CLINE. In many areas of the Cotton Belt, that is true, sir.

Senator HARKIN. And there is no other way—

Mr. CLINE. There is not an alternative crop for—

Senator HARKIN. No. I do not mean that. I am referring to other ways of cropping, whether it is strip cropping, or residue on the soil—

Mr. CLINE. Yes. That is the alternative method that I speak of, and that is the alternative plan that the SCS has come up with, that is a step in the right direction, it works for cotton producers, and I believe we will see a dramatic turnaround in the amount of erosion—

Senator HARKIN. But again, Mr. Cline, the June 1987 rule said that there would be an ACS available if it was economically unfeasible to reach the T level, and you are telling me in many of the high plains areas, that it is economically unfeasible.

Mr. CLINE. That is correct, sir.

Senator HARKIN. So it should have been no problem for farmers in those areas to qualify for an ACS under the June 1987 rule. So why would the May 3 bulletin have been necessary if in fact you are telling me it would have been economically unfeasible to bring soil losses down to the T level? Neither the June 1987 rule, nor the law that we passed specified a strict T level; under both SCS was to take into account economic hardship.

Mr. CLINE. I testified to that in my paper, and that is what it said.

Senator HARKIN. Are you telling me that it is necessary that an ACS be available for every soil, regardless of the technical and economic feasibility of reaching the T level? Do you think every soil should have an ACS?

Mr. CLINE. I cannot testify to every soil because I am not acquainted with every soil, but—

Senator HARKIN. But the May 3 bulletin—if these gentlemen here are right—extends eligibility for alternative conservation systems to every soil. Extends it to every soil.

Mr. CLINE. I suppose that the intent of that—and it is a supposition on my part—that it would be, in fairness to all producers, not showing that they were giving a special consideration to one area, or one crop, and I would suppose that would be some of the basis for their issuing this other alternative proposal.

Senator HARKIN. Well, again, I do not want to put farmers out of business or impose undue economic burden. We all want to reduce soil loss. We want to reduce it to the lowest level that we feasibly and practically can.

And if you are telling me that in your area cotton is a \$1 billion crop and if reaching the T level would be economically unfeasible, then the T level does not hold under the June 1987 rule.

What was the problem with that rule?

Mr. CLINE. The reason for my being here to testify on behalf of the cotton producers, primarily, is that there needs to be an alternative system, rather than a rigid T, and I believe the law puts that very plain. I believe SCS has provided that for some areas. Apparently they have made it for all areas, but it has to be—they have to have some flexibility in their program.

I sit here. I think soil erosion—I understand what wind erosion, water erosion is. But where does that soil go? Does it evaporate? It moves around. But is there an erosion to the point of deterioration of the soil, to devastation of the soil? Where does it go? Does it just move around?

Senator HARKIN. Yes, in many cases it is permanently lost. I can show you some places in Iowa where it is permanently lost.

Mr. CLINE. But someone else recovers that.

Senator HARKIN. Oh, I suppose the Gulf of Mexico. It is dumped into the ocean. It goes down the rivers and streams.

Mr. CLINE. I do not have that problem in the high plains of Texas where we get 16 inches of rain a year.

Senator HARKIN. But you do have wind erosion, though.

Mr. CLINE. Yes, sir.

Senator HARKIN. And it is blowing out to the Gulf of Mexico, too, or wherever it blows.

Mr. CLINE. It settles somewhere.

Senator HARKIN. It is going to settle someplace else.

Mr. CLINE. I am not in favor of that, sir.

Senator HARKIN. I understand the point you are making. I am not suggesting that is good, either.

Wouldn't the cotton and wheat producers have been OK as long as ACS's were available, where reaching T was not technically feasible or economically feasible? Wouldn't they be OK then?

Mr. CLINE. Yes, sir. We will be.

Senator HARKIN. I think so.

Mr. CLINE. Yes. I am testifying that there is a need for that.

Senator HARKIN. And no one argues against that.

Mr. DURBAN. I am not testifying that every farm should have that same—

Senator HARKIN. OK. Well, we will move ahead here. Thank you all very much for your testimony.

Our next panel will please come up: Norman Berg, Washington, D.C., representative of the Soil and Water Conservation Society; Ralph Grossi, president of the American Farmland Trust; Justin Ward, senior project associate, Natural Resources Defense Council; and Cheryl Cook, legislative assistant to the National Farmers Union.

Mr. Berg, please go ahead.

STATEMENT OF NORMAN A. BERG, WASHINGTON REPRESENTATIVE, SOIL AND WATER CONSERVATION SOCIETY, WASHINGTON, DC

Mr. BERG. Mr. Chairman, we appreciate the opportunity to testify. This is an interesting discussion this morning. It is really a seminar in terms of, first of all, how to define highly erodible land that would have to come under the compliance features, and whether or not the plans that are being developed are going to meet some sort of a requirement for soil loss that will allow some judgment as to whether these people who have that type of land will continue to qualify for farm program benefits.

I would like to have my prepared statement entered into the record. I have introduced into the hearing a document that the Soil and Water Conservation Society has compiled based on a survey that we did of the professionals at the county level in one-fifth of the country, asking their views and the views regarding how their farmers and ranchers would view the conservation provisions of the farm bill. This was an update of a survey that had been run previously 2 years ago. The people who asked these questions were

the county agents, the SES district conservationists, and the ASCS county head person.

Roughly 1,800 surveys went out. We had cooperation from USDA. They encouraged their field people to reply. We got a very heavy response, and that document is part of the record.

It did show that we have made quite a bit of an advance in terms of the understanding of the conservation provisions at the field level as contrasted to 2 years ago. The best understood provision of the conservation title, obviously, is the Conservation Reserve Program. We would like to commend the Department of Agriculture for having reached, if they accept most of the latest bid, roughly 28 million acres in the conservation reserve, and still 2 years to go to achieve either 40 or 45 million acres of that goal as stated in the law.

However, on conservation compliance and the other features of the bill, there is still a lack of understanding at the field level. They indicated that only about half of the people still have the full understanding—and this survey was completed in April of this year—of what is going to be required. So we have a big job out there to do with the people that have highly erodible land that are going to have to meet the requirements by 1990.

That document, I think, if you look through it fully, has a list of questions that deal with conservation compliance, as well as the other provisions. A good deal of that document deals with some of the barriers that we are going to face in terms of the understanding on conservation compliance.

One of the more disturbing elements of the questions that I think we have to face up to is that some of the professionals at the field level are saying that both in their opinion and in the opinion of what the farmers and ranchers think, they think the compliance provision in some way will either be postponed or diluted. I think that is something that the USDA is going to have to face up to in terms of getting the word out, because I do not hear that from the leaders of USDA, or the conservation districts, or the agencies that have supported this legislation, nor from Congress that this is something that is going to be realistic. I think the people are going to have to meet this deadline.

Senator HARKIN. Mr. Berg, Mr. Scaling said this morning the deadline will not be postponed, that we will meet that deadline.

Mr. BERG. Well, we think that is very commendable, and I think any backing off of that requires, you know, some word to get out to the field if people still feel that way.

I think the farm organizations, the commodity groups that are involved throughout the country, the media, that deals throughout rural America needs to get that word out. Because, as I said earlier, Mr. Chairman, these pros based on that survey are still reflecting that they think their farmers and ranchers are waiting to have another change. And there have been changes, obviously, and they are expecting another.

Senator HARKIN. Was this survey after the May 1988 bulletin went out?

Mr. BERG. No. Unfortunately, this was before the May 1988 directive. But the alternative systems were already in place based on the previous understanding that went out throughout the country.

I would like to make a couple of other points in the brief time that we have. I go back to the beginning of the Soil Conservation Service. According to the historian, Arthur M. Schlesinger, Jr.—and he wrote the book, “The Coming of the New Deal”—then, as now, when the Soil Conservation Service was established, there was a question as to whether farmers should be required to introduce conservation practices on their land.

The quote coming, as the historian records it, from the President at that time, President F.D. Roosevelt, “The nub of the whole question,” said the President, “If a farmer in upstate New York or Georgia or Nebraska or Oregon, through bad use of his land, allows his land to erode, does he have the inalienable right as an owner to do this? Or has the community—that is, some form of governmental agency—the right to stop him?”

Well, in the beginning, the Soil Conservation Service and the conservation districts that came a little later advocated the persuasion, voluntary route, and we have had 50 years of that. In 1985, Congress took an additional step that said that in regard to, as you have pointed out, the future participation, after 1990, in certain farm policy activities, that is many of the ASCS activities, the credit activities, crop insurance, would require, as national input into the operation of that farm or ranch, that there be conservation adopted if it hadn't been adopted.

That was a dramatic step. I go back to the fact that in listening to the early debate on the first sodbuster bill in this committee, the committee went beyond the original bill in expanding the idea as to how that should apply on sodbusted land. Not only to the field that was sodbusted, but to all of the land that was operated and all of the commodities that came under that program.

This committee later, then, in adoption of the conservation compliance feature, which was really a breakthrough in terms of a dramatic change in how national conservation policy would be implemented, set a deadline of 1988. In its wisdom, as they passed the bill finally, they gave a 5-year period to get this under way; in 1990, a deadline to start, and in 1995, a deadline to completely install systems, except if there is a soil survey still needed and that allows another 2 years to be introduced into the process.

So the intent, obviously, of the highly erodible land characteristics of conservation compliance, as I view it, and as I think as many members of the conservation coalition, in the conservation and environmental community, viewed the action of Congress, it was based on the interpretation of what was intended in the sodbuster idea. First of all, we had to accept the fact that this land—because we did not have sodbusting—had been brought in to cultivation. How to deal with it? First thing, offer a carrot, the conservation reserve, which was a very attractive feature and still is for this highly erodible land. If we can get to the 45 million acres, that dramatically decreases the acreage that has to be dealt with in terms of the highly erodible land that faces conservation compliance.

Then, as the alternative, if a land user did not want to enter the CRP and still wanted to participate in the Federal farm benefits, then there were certain requirements that were set up. Now, we have gone through the rule process, and it has been changed from

1986 and in 1987 and then the latest directive in 1988. That has raised concern as we have seen this morning.

I would like to go on record as pointing out that I think it would be very, very misleading to imply that the T concept does not have value. That in itself could be fairly confusing to a wide number of people that operate in the field.

The document that the Chief referred to that he probably wants to introduce into the record did show up in the Journal of Soil and Water Conservation in May and June of 1987. It was written by a former extension conservationist in Wisconsin, Leonard Johnson: "Soil Loss Tolerance: Fact or Myth?"

He had raised some very basic questions about whether we have the best scientific definition for highly erodible land, that additional research and evidence is still developing. It does not destroy the value of T in this rather detailed, scientific article. It points out that Bill Larson, probably the most respected soil scientist in the Nation, now headquartered at the University of Minnesota, advocates that we probably need to have a better identification of T in terms of a kind of T1, T2 approach, that recognizes that you have the physical, technical on-site characteristics built into T1, and then you bring in the social and economic considerations in terms of the off-site impacts of soil loss into a T2 idea.

I think this document here is valuable, but it is just one of the inputs that need to come on the table.

When we go back to the sodbuster discussion, we were still talking about the old land capability definition that a lot of people, for a long time, had pretty well understand: the capability 1 being the best land; capability above 6, 7, and 8, land that should be left in grass, trees, or wildlife cover. That was not good enough to administer the kind of a program that we are into now.

We move, then, to the use of the highly erodible definitions that build on the concept of using the soil loss formulas from both water and wind. Now, those are still as much art as science. We recognize that. The soil loss from water formula is much better than the wind erosion formula. We are doing additional work on that. The research people are coming up with better ways to apply that. It is difficult to apply outside the Great Plains area because we have not had that kind of experience.

There is a document that has been sent around the country, published by the Soil Conservation Service, that is an excellent document: "Soil Erosion by Water." On page 12—and this was sent around last fall—"Erosion and soil productivity, * * * Over the years, the Soil Conservation Service has established soil loss tolerance (T) levels. These T levels indicate the maximum average annual erosion rate," et cetera. "For many years, SCS erosion-control planning with land users has focused on the goal of reducing average annual erosion to T."

It recognizes, in this document, that T still does not address the T2 kind of factors that result in the off-site impact that we are equally concerned about. But I think this document, you know, circulated widely, is something that our field people in the conservation work, whether they are in the agency (SCS) that I used to head, or the conservation district officials, or those working with

the farmers and ranchers, have a pretty good feel for it now compared to where we were at any earlier time.

Senator HARKIN. Mr. Berg, I would like to go on. I will give you a minute or so to sum up, and then I will move on down the panel. Then we will come back for general discussion.

Mr. BERG. One last thing. I think what we have under way now, beyond this survey that we had, Mr. Chairman, the Soil and Water Conservation Society now has a modest grant from the Joyce Foundation to carry out the 3-year study in terms of all of the conservation provisions. We are under way with excellent cooperation from the Department. We are going to do this site-specific in many different locations of the country. I have attached, as a possible list of questions that we will ask in conservation compliance, to my testimony. Some of these are issues that we still need to have more work.

Now, the professional soil conservationists, as I see the field throughout the country, are a proud and a competent and a dedicated cadre of people working in this area. For decades, they have been educated to the need to control soil loss. They have researched the erosion process. They have developed techniques and procedures to reduce soil erosion to levels that will allow the soil to maintain its productivity, indefinitely.

I think that ethic, strengthened by the legal sanctions of the conservation provisions of the farm bill, is something that most of these field-based people are willing to take and apply at the field level. I also am a conservation district governing board member in Maryland, and we signed several conservation compliance plans at our last board meeting. They will reduce soil loss on those farms to an acceptable level, and our board was willing to signoff on them. But I understand in some parts of the country, the district boards are disturbed to the point where they are not approving the plans. That is not a good way to go.

[The prepared statement and attachments of Mr. Berg follow:]

To advance the science and art of good land and water use worldwide



Statement
of
Norman A. Berg
Washington Representative
Soil & Water Conservation Society

to the
Senate Committee on Agriculture, Nutrition, and Forestry
Subcommittee on Nutrition and Investigations

October 4, 1988

Mr. Chairman and members of this Sub-Committee, the Soil and Water Conservation Society, a private, non-profit organization dedicated to advancing the science and art of good land use, appreciates this opportunity to testify.

The U.S. Congress, with support from several conservation, farm, environmental, and other national organizations, enacted Title XI - Conservation - of the Food Security Act of 1985 (FSA), in the 99th Congress. The skill and insight into the process resulting in good laws, by those who legislate, is equally desirable in those who administer. The several provisions of the 1985 Farm Bill that relate to soil and water conservation, have had nearly three years of implementation under the leadership of the U.S. Department of Agriculture (USDA). How well has the USDA carried out the intent of this Committee, as it was passed as the most important soil conservation legislation since 1935?

In the interest of time, I'll request that my full statement be made part of the official record of this hearing. Thanks.

Several of us recently attended the 43rd Annual Meeting of our Society held in Columbus, Ohio. Along with the drought that is tearing our farms, ranches, and forests, the several provisions of FSA that relate to conservation, had a lot of discussion.

Earlier this year I called to the attention of the Congress a Survey by SWCS that, like the first one 18 months ago, involved a one-in-five random sample of County Agents, SCS District Conservationists, and County Directors of ASCS. We asked nearly 1800 county-based professionals to each tell us "how you feel and how you think farmers and ranchers feel about all the conservation provisions in the 1985 farm bill. We had a combined return of 72 percent, thanks to encouragement from U.S.D.A. and the agency leaders responsible for implementation of the law.

The results of that survey are published in the document that has been provided for your use. Additional analysis is still being done that is not included in this document, but will be provided to your Committee, if of any value for your work. We have briefed key USDA officials using the document at hand.

Formerly the Soil Conservation Society of America

A majority (87 percent) of the agency personnel characterized implementation of the conservation provisions to date as "moderately" or "highly" successful. Further examination of regional differences in the responses to certain questions, and to important relationships that may or may not exist between and among selected questions, is being done by Dr. Peter Nowak, a University Professor, with Extension, at Madison, Wisconsin.

The Conservation Compliance provision was explored in several questions. In 1987, only 21.8 percent of the respondents said farmers pretty well or fully understand this provision. This increased to 47.3 percent in 1988. Those saying farmers do not understand Conservation Compliance declined from 22.3 percent in 1987 to 7.4 percent in 1988 (page 31 Questions 8 through 18 (pages 33-52 further address this provision of the law. For example # 1 (pages 36-44 examines several potential barriers to the success of Conservation Compliance, and # 12 (page 45) compares Conservation Compliance Swampbuster, and Sodbuster as to which one is likely to pose the greatest problem from the standpoint of implementation. This was a new question added in the 1988 survey. Almost two-thirds (68.8 percent) of the respondents said Conservation Compliance would pose the greatest implementation problem. Three-fourths of the USDA officials said farmers believe conservation compliance provisions will be delayed and/or relaxed.

It is important to remember that this was a survey of USDA officials' opinions of what farmers in their county think. Farmers themselves were not asked. The results could tell as much about differences in opinions among SCS, ASCS and CES as they do about their farmers. The answers to all the questions should provide additional insight for your oversight work.

We had previously introduced, at an earlier hearing the final results of a Conference held by the Society in Kansas City. The "White Paper" prepared by Ken Cook, summarized the views of those asked to examine two years of implementation of the Conservation Title. The 500 participants agreed that all the conservation features had opened new possibilities for reducing soil loss, and improving water quality and wildlife habitat. The Conservation Reserve Program (CRP) will probably have about 28 million acres enrolled (1986-1988). The CRP has caused significant changes in the manner in which that land is used (at least during the ten year contract). We hope that in 1989 and 1990 the CRP can achieve 45 million acres.

However, even though we reach the CRP goal by 1991, over the long run the Conservation Compliance provision will probably have the most enduring influence on how highly erodible cropland will be managed, as long as "farm programs" are available.

This new reform in the relationship between the federal "farm programs" and the nation's farm and ranch operators should, if it works the way it was envisioned result in improvements in the use and treatment of millions of acres of eroding crop-

land, each and every year, well into the next century.

The transition into compliance was never expected to be an easy one. We face a delicate situation where local latitude is needed. We also know that limits to local attitude must be established and maintained, or there is apt to be too much delay and confusion. We expected and supported a reasonable degree of flexibility based on site-specific conditions.

USDA and landusers face the task of developing and applying about 800,000 conservation plans, on about 141 million acres, by the deadlines established in the law. Conservation plans for FSA purposes are different from those developed for resource management systems for the entire land unit. Highest priority is to plan highly erodible cropland fields to meet the law.

We would hope that the goal of developing conservation plans on all lands is not abandoned. Soil degradation continues to be a problem on millions of acres that are not impacted by the Food Security Act of 1985, but threatens the long-term sustainability of the food and fiber production system.

However, we recognize that the stringent time requirements of developing needed conservation plans by January 1 1990 will permit only a minimum amount of planning, by SCS, on land that is not defined as "highly erodible cropland"

SCS has moved rapidly to make the "HEL" determinations on the farms, nationwide. This is a priority, as landusers need to know if they have such land and want a plan by 1/1/90.

The definition of "HEL" is the base from which Title XII exerts its impact on resource conservation and land use practices. The driving principle of the conservation title is that an acceptable degree of resource stewardship must be practiced to retain eligibility for several important federal farm program benefits. That title established a covenant between farmers and the public—the farmer agrees to take proper care of the land, the public agrees to help support farm income. It became law, because it is a sound deal for everyone. The definition of highly erodible land (HEL) is the key. It determines the pool of land subject to, eligible for, the provisions in the title. Some HEL land is voluntarily being bid into the Conservation Reserve, and other HEL will be subjected to conservation compliance.

Potential HEL, not recently used for small grain or row crops is already impacted under the sodbuster provision. There was an earlier relaxation on this type of soil, but we are pleased that sodbusted land must be farmed to attain or approximate the soil loss tolerance level of the plan.

An issue in this hearing is the goal for reducing soil loss through use of the conservation compliance provision. A look back over the rule-making that has taken place may help.

An interim rule was published on June 27, 1986. This proposal adopted T values as the operational goal for soil erosion reduction in the conservation compliance plans. Rates up to 2 T could be tolerated in certain circumstances. Some plans were developed under this policy, that appeared to those who helped enact the law, as meeting the intent of provision.

On June 29, 1987, USDA proposed a change in that 1986 rule. The newer proposal called for the use of SCS's field technical guides to determine whether a producer would bring soil erosion, from either wind or water, sufficiently under control in the context of conservation compliance. The Society and others supported this. It was a controversial, but significant change. More HEL-FAS conservation plans were developed by SCS

technicians in the field under this procedure. A publication, Soil Erosion by Water, by SCS in August 1987, stated that, "Over the years, the Soil Conservation Service has established soil loss tolerance (T) levels. These T levels indicate the maximum average annual erosion rate consistent with sustaining the soil's long-term productivity". We applaud this bulletin. It has been widely distributed to the general public by USDA.

On May 3, 1988, a National Bulletin (No 180-B-31) from SCS to their field force, stated that "Alternative Conservation Systems (ACS) are to be included in all the field office technical guides where there is highly erodible land subject to the compliance provision of the 1985 FSA. ACS will be developed for all HEL soils, either as individual soil map units or as groups of soil map units, subject to FSA requirements. No reference to T should appear on the guide sheets. Use of T terminology for ACS can be misleading and cause confusion. It is often misinterpreted as a minimum standard. ACS's are to be made available for selection by every farmer with that soil-crop situation in that FOTB area, unless the farmer is converting native vegetation".

This policy statement further introduced economics, for the ACS's will reflect practical, cost-effective solutions for reducing soil erosion. Local groups, including conservation districts (designated by the law to approve a conservation system that is in conformity with the technical standards set forth in the SCS technical guide for that district) should have been consulted in the development of ACS. Action was required by June 15, 1988 by each SCS State Office. However this mandate for ACS everywhere, has now alarmed some for long standing cooperative relationships between SCS and local conservation districts, and state agencies. However, the latest change for conservation compliance planning is widely being implemented by SCS and some conservation districts are not approving the plans. This is not a desirable situation.

Earlier the Department had justified the use of field office technical guides and local judgment rather than a T-based empirical goal in defining adequate erosion control under conservation compliance. There were those who asked, will

conservation compliance work and remain politically viable when implemented by thousands of individuals following a set of imprecise, non-quantitative guidelines? What will be the landowners' understanding of "practical, cost-effective solutions" for reducing erosion for compliance (1990-1995).

Farmers and their farm and commodity organizations, should be concerned and will probably monitor whether ACS's are consistent across county and state lines where the same soil-crop situation is shared. Above all, landowners don't like being treated unfairly. Sound policy innovations have failed because initial steps toward implementation were perceived as unfair. This may, unfortunately, become the fate of compliance.

I'm reminded of the SCS mission statement. It reads, "The mission of the Soil Conservation Service is to provide national leadership in the conservation and wise use of soil water and related resources through a balanced cooperative program that protects, restores and improves those resources". The agency has, with the conservation districts and their cooperators, an excellent record of public service. SCS is gathering data and making analysis to determine the impact of ACS on soil loss reduction. However, they may face a mission crisis, if the public views implementation of FSA as weak.

I have great respect for the vast majority of the SCS field personnel. They are dedicated technicians. We expect each of those professional conservationists to push soil erosion reduction as far as he or she thinks practical. We know that local conditions vary and that individuals differ. Their own personal values about resource stewardship will be used to determine what is a reasonable cost to impose on a farmer. There are other needs: preserving family farms, fairness local and regional competition and the need to retain good working relationships with the local landowners and other co-workers.

Even with a T-based standard, there will still be many issues local technicians must resolve with each farmer. An accepted standard, until we have something better, would in my opinion, make the task more manageable and assure an acceptable degree of national consistency. Who and how will compliance on a farm be determined? How will the SCS technician be evaluated?

The Soil and Water Conservation Society has recently obtained a modest three-year grant from the Joyce Foundation. Underway is a field evaluation of all the provisions of Title XII. SCS, ABCS, and Conservation Districts have members on the project steering committee. They and several others are fully involved in the design and conduct of this study. We do appreciate USDA cooperation. Without their assistance the task could not be carried out. We intend to keep concerned interests informed. I have attached the tentative list of questions that will be asked at field locations on conservation compliance.

The road to this legislation was not an easy one. It now has

many supporters, including long-term land stewards, who were above all pleased at the linkage of farm commodity and USDA conservation policy. Those now charged with responsibility for implementation find a new era: "conservation in transition". We can ill afford to lose the best opportunity the nation now has in fifty years to bring conservation sense to national agricultural policy. Congress gave the Secretary a good law.

The issue: how such erosion reduction [will, should] be achieved by using the conservation compliance feature of the law as leverage. The CRP is the carrot.

The SCS field professional is probably not going to abandon the long-term salutation of: I'm from the government and I'm here to help you, Mr. Farmer. The option: I'm here to close down your farm, was not the intent of the law, is not the intent of the conservation and environmental community.

I will be pleased to respond to your questions or comments.

Attachments follow:

Conservation Compliance

1. How is the conservation planning task progressing? Can the 1990 deadline be met?
2. Are plans being written that effectively control erosion?
3. How frequently and extensively are alternative conservation systems being used in compliance plans?
4. Have the use of ACSs encouraged greater interest in compliance and participation among farmers?
5. Do the technical guides and compliance plans reflect economic and technical realities of the agricultural enterprises in the area?
6. Does compliance planning start on the assumption of reaching T or simply achieving compliance with an ACS?
7. How are you reconciling compliance plans that don't achieve T if state law requires T?
8. What percentage of compliance plans in your district will achieve T once completed?
9. Do the alternative conservation systems in the field office technical guide achieve a significant erosion reduction?
10. Can crop residue levels specified in an ACS requiring conservation tillage realistically be achieved, for example, in the case of soybeans?
11. How many farmers have requested changes in their plans that formerly set T as a goal but now wish to have an ACS?
12. How will the change to ACSs affect farmers' interest in a resource management system in the future?
13. Who will spot-check for compliance? How much spot-checking will be done?
14. What procedure will be used in the spot-checks?
15. Has compliance forced any farmers out of business?
16. How much HEL is missing from the program?
17. Has compliance been an incentive for any farmers to decline further participation in federal programs?
18. What procedure will be used to implement practices (construction, etc.) or check implementation by specified target dates in plans?
19. Have you retained the list of farm owners/operators who received HEL notices?
20. What plans exist for application assistance? In other words, will you be in a position to help farmers implement their plans on schedule?

Conservation Compliance

-2-

21. How do you think farmers would rate the planning and application assistance they have received?
22. What is the local perception of the program?
23. Are any changes needed in the law or administrative rules?
24. Can or should the compliance concept be applied to any other resource management problems?



A Survey

**The Conservation Title of
the Food Security Act of 1985**

Please tell us how *you* feel and how *you* think farmers and ranchers
feel about the conservation provisions in the 1985 farm bill

Conducted by the
Soil and Water Conservation Society

QUESTIONNAIRE

1. In general, would you describe current soil erosion on cropland in your county as (check one):
 - a. _____ Severe
 - b. _____ Serious
 - c. _____ Moderate
 - d. _____ Slight
 - e. _____ Nonexistent

2. In your view, do farmers in your county perceive current soil erosion to be (check one):
 - a. _____ Severe
 - b. _____ Serious
 - c. _____ Moderate
 - d. _____ Slight
 - e. _____ Nonexistent

3. To what extent do you think each individual farmer in your county accurately recognizes the existence of "highly erodible land" on his or her own cropland (check one)?
 - a. _____ Very accurately
 - b. _____ Quite accurately
 - c. _____ Somewhat accurately
 - d. _____ Inaccurately

4. How would you generally characterize the reaction of farmers in your county to the conservation provisions (conservation reserve, sodbuster, swampbuster, conservation compliance, conservation easements) in the 1985 farm bill (check one)?
 - a. _____ Very cooperative
 - b. _____ Somewhat cooperative
 - c. _____ Neutral
 - d. _____ Somewhat uncooperative
 - e. _____ Very uncooperative

5. How would you describe the current level of farmer interest in these provisions of the farm bill in your county (please check one for each provision)?

	Level of Interest					
	High and Increasing	High but Declining	Moderate and Increasing	Moderate but Declining	Low but Increasing	Low and Declining
a. Conservation reserve	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Sodbuster	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Swampbuster	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Conservation compliance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Conservation easements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Given your experience with farmers, please rate the importance of each of the following reasons why farmers, after six sign-ups, are not participating in the CRP (check one for each reason):

	Importance of Reason			
	Very Important	Important	Somewhat Important	Not Important
a. Rental rates not high enough.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Don't want to forfeit grain base and other commodity program benefits.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Don't understand eligibility requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Do not recognize that they have eligible acres.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Eligibility requirements are too restrictive and it is difficult to get land into CRP.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Too much paperwork involved or waiting lines too long.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Don't agree with restrictions on use of CRP acres.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Don't understand how CRP relates to other conservation provisions in the farm bill, for example, conservation compliance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Can't get landlord or tenant to consider participating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Are getting conflicting information on CRP from agencies.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. Object to contract repayment provisions for violation of the contract or transfer of property.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. The difficulties involved with converting cropland into CRP acres.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. Farmers are waiting for bonus to be added to CRP payments in future sign-ups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n. Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. To what extent do you think farmers in your county currently understand the following provisions in the Conservation Title of the 1985 farm bill (check one for each provision)?

	Level of Understanding			
	Fully Understand	Pretty Well Understand	Somewhat Understand	Do Not Understand
a. Conservation reserve	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Sodbuster	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Swampbuster	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Conservation compliance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Conservation easements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

19. There is some discussion about the 1990 farm bill, or a subsequent farm bill, containing a cross-compliance provision relating to nonpoint-source water pollution. If farmers want to remain eligible for USDA programs, they will have to adopt the necessary best management practices to reduce off-farm pollution of surface water and groundwater. To what extent do *you* think farmers in your county would support such a water quality compliance provision (check one)?
- _____ Very supportive
 - _____ Supportive
 - _____ Opposed
 - _____ Very opposed
20. In general, how would *you* describe the current surface water and/or groundwater pollution problem in your county (check one)?
- _____ Severe
 - _____ Serious
 - _____ Moderate
 - _____ Slight
 - _____ Nonexistent
21. To what extent do *you* think agricultural activities contribute to the water pollution problem in your county (check one)?
- _____ Sole cause
 - _____ Major cause but not sole cause
 - _____ Minor cause
 - _____ No cause
 - _____ Don't know
22. How would *you* describe the current level of interest among farmers in your county in low-input (sustainable, alternative) agriculture (check one)?
- _____ High
 - _____ Moderate
 - _____ Some
 - _____ Little
 - _____ None
23. To what extent have the agencies in your county cooperated with each other in promoting and implementing the CRP and other provisions in the Conservation Title (check one)?
- _____ More than with other programs
 - _____ About the same as with other programs
 - _____ Less than with other programs
24. In general, how would *you* characterize implementation of the conservation provisions in the 1985 farm bill in your county to this point in time (check one)?
- _____ Highly successful
 - _____ Moderately successful
 - _____ Moderately unsuccessful
 - _____ Highly unsuccessful

12. In your view, which of the following provisions is likely to pose the greatest problem from the standpoint of implementation in your county (check one)?
- Sodbuster
 - Swampbuster
 - Conservation compliance
13. Is a group planning process being used in your county to complete the planning requirements associated with conservation compliance (check one)?
- Yes
 - No
 - Don't know, not my responsibility
- If "yes", how effective is the group planning process (check one)?
- Very effective
 - Somewhat effective
 - Not effective at all
14. Are computers being used in your county to complete the planning requirements associated with conservation compliance (check one)?
- Yes
 - No
 - Don't know
15. Have the highly erodible land determinations been completed in your county (check one)?
- Yes
 - No
 - Don't know, not my responsibility
16. What percentage of the conservation planning task associated with the compliance provisions has been completed to date in your county (check one)?
- 0 - 20%
 - 21 - 40%
 - 41 - 60%
 - 61 - 80%
 - 81 - 100%
 - Don't know
17. In your judgment, are farmers in your county thinking that the timetable for implementation of the conservation compliance provisions will change (check one)?
- Yes
 - No
 - Don't know
18. In your judgment, are farmers in your county thinking that enforcement of the conservation compliance provisions will be relaxed (check one)?
- Yes
 - No
 - Don't know

19. There is some discussion about the 1990 farm bill, or a subsequent farm bill, containing a cross-compliance provision relating to nonpoint-source water pollution. If farmers want to remain eligible for USDA programs, they will have to adopt the necessary best management practices to reduce off-farm pollution of surface water and groundwater. To what extent do you think farmers in your county would support such a water quality compliance provision (check one)?
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 - _____ Major cause but not sole cause
 - _____ Minor cause
 - _____ No cause
 - _____ Don't know
22. How would you describe the current level of interest among farmers in your county in low-input (sustainable, alternative) agriculture (check one)?
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 - _____ Moderate
 - _____ Some
 - _____ Little
 - _____ None
23. To what extent have the agencies in your county cooperated with each other in promoting and implementing the CRP and other provisions in the Conservation Title (check one)?
- _____ More than with other programs
 - _____ About the same as with other programs
 - _____ Less than with other programs
24. In general, how would you characterize implementation of the conservation provisions in the 1985 farm bill in your county to this point in time (check one)?
- _____ Highly successful
 - _____ Moderately successful
 - _____ Moderately unsuccessful
 - _____ Highly unsuccessful

25. Which of the following factors do you have the greatest need for to implement the conservation provisions in your county (check one)?
- a. _____ More staff to work with farmers
 - b. _____ More factual information and educational materials for farmers
 - c. _____ More cooperation and coordination between agencies
 - d. _____ More funds for equipment (vehicles, computers, etc.)
 - e. _____ More training of staff on how to implement the provisions
 - f. _____ Other _____

26. Do you have any thoughts or suggestions about what ought to happen to the land enrolled in the CRP once the 10-year contracts expire?

27. Is there anything else you would like to say about the conservation provisions of the 1985 farm bill or their implementation?

A National Survey
of County-Level
USDA Program Administrators

The Conservation Title of the Food Security Act of 1985

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Soil and Water Conservation Society



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INTRODUCTION

Farmers, of course, must ultimately decide whether or not to enroll land in the conservation reserve and whether or not to accept or reject the compliance provisions in the Conservation Title of the Food Security Act of 1985. But U.S. Department of Agriculture program administrators at the county level will play a key role in terms of farmers' response to this historic legislation. How these local program administrators feel personally about the provisions, how they perceive the feelings of farmers and ranchers toward the provisions and natural resource stewardship responsibilities in general, and what thoughts and attitudes are conveyed in any exchange between these local administrators and their farm and ranch clientele groups will significantly influence the provisions' implementation across the land.

With this in mind the Soil and Water Conservation Society, at USDA's request and with the department's support, undertook a survey of county-level program managers on farm bill-related issues in March 1988. The survey was a follow-up survey to one conducted a year earlier by SWCS in cooperation with *Successful Farming* magazine and The Joyce Foundation.

This year's survey, like the first, involved a one-in-five random sample of (a) county directors with the Agricultural Stabilization and Conservation Service, (b) county agents with the Cooperative Extension Service and (c) district conservationists with the Soil Conservation Service. A survey questionnaire was mailed to each individual in the sample with a cover letter explaining the purpose of the survey. One week thereafter, a postcard was mailed to each individual reminding the individual to complete and return the survey questionnaire. The results reported here are based on returns of 80 percent for ASCS (485/609), 61 percent for CES (375/613), and 74 percent for SCS (407/548)--a combined return of 72 percent (1,267/1,770).

In this report, results are presented to each question by the number of respondents and the percentage of responses. The returns are displayed by agency and in combination. Accompanying the results in each case is an interpretation of their meaning and significance along with important comparisons to results from the year-earlier survey and from a survey of farmers by the *Successful Farming* research staff involving similar questions.

Additional analysis is being done that is not included in this document. For example, information from the National Resources Inventory and Census data have been superimposed on the survey data set. A further look is also being taken at possible regional differences in the responses to certain questions and to important relationships that may or may not exist between and among selected questions.

Thanks are due Peter Nowak of the University of Wisconsin who arranged for computer analysis of the survey data and did much of the interpretive work. Also assisting with the interpretation of results were Norm Berg, Washington, D.C. representative for SWCS, and John Walter, conservation editor for *Successful Farming* magazine.

Max Schnepf
Editor

1. In general, would you describe current soil erosion on cropland in your county as:

	Respondent's Agency			All
	SCS	ASCS	CES	Respondents
Nonexistent				
Number	1	2	10	13
Percent	0.2	0.4	2.7	1.0
Slight				
Number	45	94	91	230
Percent	11.2	19.7	24.5	18.4
Moderate				
Number	187	274	185	646
Percent	46.4	57.4	49.7	51.6
Serious				
Number	148	100	76	324
Percent	36.7	21.0	20.4	25.9
Severe				
Number	22	7	10	39
Percent	5.5	1.5	2.7	3.1

Slightly more than half (51.6 percent) of all agency respondents viewed cropland soil erosion as moderate. A quarter of the respondents (25.9 percent) believed erosion in their respective county was serious. Only a few (3.1 percent) said it was severe. Less than a fifth (18.4 percent) said cropland erosion was slight, while the number viewing erosion as nonexistent was extremely limited (1.0 percent).

Soil Conservation Service (SCS) employees were more likely to perceive erosion as more prevalent than either Agricultural Stabilization and Conservation Service (ASCS) or Cooperative Extension Service (CES) employees. Extension employees were more likely to view erosion as slight or nonexistent than respondents from the other two agencies.

The perception of soil erosion as a problem on cropland declined somewhat between the 1987 and 1988 surveys. In 1987, 6.2 percent of all respondents viewed county cropland erosion as severe and 33.0 percent said it was serious. These proportions dropped to 3.1 and 25.9 percent, respectively, in 1988. Those saying erosion was moderate increased from 45.6 percent in 1987 to 51.6 percent in 1988. Those believing it was either slight or nonexistent increased from 15.2 percent in 1987 to 19.4 percent in 1988.

2. In your view, do farmers in your county perceive current soil erosion to be:

	Respondent's Agency			All Respondents
	SCS	ASCS	CES	
Nonexistent				
Number	7	7	14	28
Percent	1.7	1.5	3.8	2.2
Slight				
Number	160	171	155	486
Percent	39.6	35.8	41.6	38.7
Moderate				
Number	187	249	168	604
Percent	46.3	52.1	45.0	48.1
Serious				
Number	49	51	35	135
Percent	12.1	10.7	9.4	10.8
Severe				
Number	1		1	2
Percent	0.2		0.3	0.2

When asked about farmers' perceptions of cropland soil erosion, less than half (48.1 percent) of the respondents said land users believed it was moderate. Agency personnel said that only 1 in 10 farmers (10.8 percent) would say erosion was serious, while very few (0.2 percent) farmers believe it to be severe. Almost two-fifths of the respondents (38.7 percent) said farmers believe erosion to be slight. However, the belief was that only a few farmers (2.2 percent) consider erosion to be nonexistent.

Extension employees were more likely to think that farmers view soil erosion as slight or nonexistent, while SCS employees are more likely to say that farmers perceive serious erosion problems. Just over half (52.1 percent) of the ASCS employees said farmers consider soil erosion to be moderate. This compared to 46.3 percent of SCS employees and 45.0 percent of CES respondents.

There was little change between the 1987 and 1988 surveys; those giving serious and moderate responses decreased slightly, while those giving a slight response increased. In 1987, those saying farmers believed there were serious erosion problems in the county totaled 13.3 percent. This declined to 10.8 percent in 1988. About half (50.4 percent) of all respondents said farmers perceived moderate erosion problems in 1987. This fell to 48.1 percent in 1988. Respondents who said farmers believed there were slight erosion problems increased from 33.6 percent in 1987 to 38.7 percent in 1988.

3. To what extent do you think each individual farmer in your county accurately recognizes the existence of "highly erodible land" on his or her own cropland:

	Respondent's Agency			All Respondents
	SCS	ASCS	CES	
Inaccurately				
Number	80	61	24	165
Percent	20.0	12.7	6.5	13.2
Somewhat Accurately				
Number	227	228	229	684
Percent	56.8	47.6	61.6	54.7
Quite Accurately				
Number	88	165	105	358
Percent	22.0	34.4	28.2	28.6
Very Accurately				
Number	5	25	14	44
Percent	1.3	5.2	3.8	3.5

Just over half (54.7 percent) of the respondents said farmers somewhat accurately recognize the existence of highly erodible land on their own farms. Over a quarter (28.6 percent) of the respondents said farmers were quite accurate and a few (3.5 percent) said they were very accurate in doing so. However, on the other end of the scale, there were 13.2 percent of the respondents who said farmers were inaccurate in recognizing highly erodible cropland.

One in 5 (20 percent) SCS employees said farmers were inaccurate in their recognition of highly erodible land. This compared to only 12.7 percent of ASCS employees and 6.5 percent of CES employees. While less than half (47.6 percent) of ASCS respondents said farmers were somewhat accurate, more than half of SCS (56.8 percent) and CES (61.6 percent) respondents said farmers were only somewhat accurate. ASCS respondents (34.4 percent) were more likely to say farmers are quite accurate when compared to SCS (22.0 percent) and CES (28.2 percent) respondents. The same agency pattern existed among respondents saying that farmers are very accurate in their recognition of highly erodible land on their farms.

Respondents believing farmers are very accurate or quite accurate in recognizing highly erodible land on their own farms increased between 1987 and 1988. Those saying very accurate increased from 1.6 percent to 3.5 percent. Respondents saying farmers were quite accurate increased from 20.9 percent to 28.6 percent. Those saying farmers recognized highly erodible land somewhat accurately on their farms decreased from 63.0 percent to 54.7 percent. Those saying farmers are inaccurate in this perception decreased from 14.5 percent to 13.2 percent across this time period.

4. How would you generally characterize the reaction of farmers in your county to the conservation provisions (conservation reserve, sodbuster, swampbuster, conservation compliance, conservation easements) in the 1985 farm bill:

	Respondent's Agency			All
	SCS	ASCS	CES	Respondents
Very Uncooperative				
Number	4	15	3	22
Percent	1.0	3.2	0.8	1.8
Somewhat Uncooperative				
Number	62	111	67	240
Percent	15.3	23.5	18.0	19.2
Neutral				
Number	86	115	114	315
Percent	21.3	24.3	30.6	25.2
Somewhat Cooperative				
Number	197	181	161	539
Percent	48.8	38.3	43.2	43.1
Very Cooperative				
Number	55	51	28	134
Percent	13.6	10.8	7.5	10.7

This new question in the 1988 survey was an attempt to assess the degree of cooperation USDA employees are receiving from farmers in implementing the conservation provisions of the 1985 Food Security Act. Only about 1 in 5 respondents said farmers were either very uncooperative (1.8 percent) or somewhat uncooperative (19.2 percent). Only a quarter (25.2 percent) of all respondents said farmers were neutral in their response to these conservation provisions. More than two-fifths (43.1 percent) of the respondents said farmers were somewhat cooperative and 10.7 percent said they were very cooperative.

ASCS respondents were more likely to view farmers as uncooperative than were respondents from the other two USDA agencies. While only 3.2 percent of ASCS respondents said farmers were very uncooperative, almost a quarter (23.5 percent) said farmers were somewhat uncooperative. This compares to 1.0 percent of SCS and 0.8 percent of CES respondents saying farmers were very uncooperative and 15.3 percent of SCS and 18.0 percent of CES employees saying farmers were somewhat uncooperative. SCS respondents were more likely than the other two USDA agency respondents to say farmers were somewhat cooperative (48.8 percent) or very cooperative (13.6 percent). This compares to 38.3 percent of ASCS respondents who said farmers were somewhat cooperative, and 10.8 percent who said they were very cooperative. Within CES there were 43.2 percent of the respondents who said farmers were somewhat cooperative and 7.5 percent who said they were very cooperative.

5a. How would you describe the current level of farmer interest in the conservation reserve provision of the farm bill in your county:

	Respondent's Agency			All
	SCS	ASCS	CES	Respondents
Low and Declining				
Number	74	81	49	204
Percent	18.5	17.0	13.3	16.4
Low but Increasing				
Number	69	87	61	217
Percent	17.3	18.2	16.6	17.4
Moderate and Decreasing				
Number	79	102	59	240
Percent	19.8	21.4	16.0	19.3
Moderate and Increasing				
Number	79	122	124	325
Percent	19.8	25.6	33.7	26.1
High but Decreasing				
Number	70	47	41	158
Percent	17.5	9.9	11.1	12.7
High and Increasing				
Number	29	38	34	101
Percent	7.3	8.0	9.2	8.1

Overall, 33.8 percent of respondents said interest in CRP was low, 45.4 percent said it was moderate, and 20.8 percent said it was high. Just under a half (48.4 percent) said interest was decreasing, while the remainder (51.6 percent) said it was increasing. The largest single response was the 26.1 percent of respondents who said interest in CRP was moderate and increasing.

SCS respondents were less likely to see interest as moderate (39.6 percent) compared to ASCS (47.0 percent) or CES (49.7 percent), but more likely to view it as high (24.8 percent) relative to ASCS (17.9 percent) and CES (20.3 percent). Extension was more likely to see interest as increasing (59.5 percent) than either ASCS (51.8 percent) or SCS (44.4 percent).

In comparing 1987 and 1988 returns, there were 17.5 percent in 1987 who saw interest as high compared to 20.8 percent in 1988; 43.5 percent who said interest was moderate in 1987 versus 45.4 percent in 1988; and 39.1 percent who said it was low in 1987 compared to 33.8 percent in 1988. However, the direction of interest has changed between the two surveys. In 1987, there were 26.3 percent who said interest was declining compared to 48.4 percent in 1988.

5b. How would you describe the current level of farmer interest in the sodbuster provision of the farm bill in your county:

	Respondent's Agency			All
	SCS	ASCS	CES	Respondents
Low and Declining				
Number	45	53	69	167
Percent	11.3	11.2	18.9	13.5
Low but Increasing				
Number	95	110	84	289
Percent	23.9	23.2	23.0	23.3
Moderate and Decreasing				
Number	55	56	63	174
Percent	13.9	11.8	17.2	14.1
Moderate and Increasing				
Number	151	211	124	486
Percent	38.0	44.4	33.9	39.3
High but Decreasing				
Number	20	11	12	43
Percent	5.0	2.3	3.3	3.5
High and Increasing				
Number	31	34	14	79
Percent	7.8	7.2	3.8	6.4

Interest in the sodbuster provision was described as high by 9.9 percent of the respondents, moderate by 53.4 percent, and low by 36.8 percent. There were 69.0 percent who said interest was increasing.

ASCS respondents were more likely to see interest increasing (74.8 percent) than either SCS (69.7 percent) and CES (60.7 percent) respondents. There were 12.8 percent of SCS respondents who characterized interest as high, 51.9 percent as moderate, and 35.2 as low. In ASCS there were 9.5 percent who said it was high, 56.2 percent saying it was moderate, and 34.4 percent viewing it as low. There were 7.2 percent of CES respondents who said interest was high, 53.4 percent moderate, and 36.8 percent low.

In 1987, there were 8.8 percent who said interest was high compared to 9.9 percent in 1988. Those reporting a moderate level of interest, however, increased from 37.0 percent in 1987 to 53.4 percent in 1988. More than half (54.2 percent) reported low interest in 1987, but this response declined to 36.8 percent in 1988. In 1987, there were 80.4 percent of the respondents who said interest was increasing. This declined to 69.0 percent in 1988.

5c. How would you describe the current level of farmer interest in the swampbuster provision of the farm bill in your county:

	Respondent's Agency			All Respondents
	SCS	ASCS	CES	
Low and Declining				
Number	128	135	121	384
Percent	32.3	29.9	33.8	31.8
Low but Increasing				
Number	106	132	90	328
Percent	26.8	29.2	25.1	27.2
Moderate and Decreasing				
Number	26	41	52	119
Percent	6.6	9.1	14.5	9.9
Moderate and Increasing				
Number	95	111	79	285
Percent	24.0	24.6	22.1	23.6
High but Decreasing				
Number	7	7	7	21
Percent	1.8	1.5	2.0	1.7
High and Increasing				
Number	34	26	9	69
Percent	8.6	5.8	2.5	5.7

Although interest was not as high for the swampbuster provision as it is for the other conservation provisions, it was increasing. In 1987, only 4.1 percent of the respondents said interest was high. This increased to 7.4 percent in 1988. The moderate level of interest increased from 19.7 percent in 1987 to 33.5 percent in 1988. A low level of interest declined from 76.1 percent in 1987 to 59.0 percent in 1988. The direction of interest, however, was changing as in the case of CRP and sodbuster. In 1987, there were 60.2 percent who said interest was increasing. This compares to 56.5 percent in 1988.

There are few differences among the three groups of agency respondents. By agency, those reporting high, moderate, and low interest were respectively: SCS, 10.4, 30.6, and 59.1 percent; ASCS, 7.3, 33.7, and 59.1 percent; and CES, 4.5, 36.6, and 58.9 percent. CES (49.7 percent) respondents were less likely to see interest as increasing than either SCS (59.4 percent) or ASCS (59.6 percent) respondents.

5d. How would you describe the current level of farmer interest in the conservation compliance provision of the farm bill in your county:

	Respondent's Agency			All
	SCS	ASCS	CES	Respondents
Low and Declining				
Number	14	40	20	74
Percent	3.5	8.4	5.5	6.0
Low but Increasing				
Number	66	106	56	228
Percent	16.5	22.3	15.4	18.4
Moderate and Decreasing				
Number	16	35	29	80
Percent	4.0	7.4	8.0	6.5
Moderate and Increasing				
Number	226	235	203	664
Percent	56.6	49.4	55.8	53.6
High but Decreasing				
Number	7	11	19	37
Percent	1.8	2.3	5.2	3.0
High and Increasing				
Number	70	49	37	156
Percent	17.5	10.3	10.2	12.6

Interest in conservation compliance was described as high by 15.6 percent of the respondents, moderate by 60.1 percent, and low by 24.4 percent. A significant majority (84.6 percent) said interest was increasing.

SCS respondents were more likely to see interest increasing (90.6 percent) than either ASCS (82.0 percent) or CES (81.4 percent) respondents. There were 19.3 percent of SCS respondents who characterized interest as high, 60.6 percent as moderate, and 20.0 percent who said it was low. In ASCS, there were 12.6 percent who said it was high, 56.8 percent saying it was moderate, and 30.7 percent viewed it as low. There were 15.4 percent of CES respondents who said interest was high, 63.8 percent moderate, and 20.9 percent low.

In 1987, there were 11.6 percent who said interest was high compared to 15.6 percent in 1988. Those reporting a moderate level of interest, however, increased from 45.8 percent in 1987 to 60.1 percent in 1988. There were 42.7 percent reporting low interest in 1987, but this number declined to 24.4 percent in 1988. In 1987, there were 90.9 percent of the respondents who said interest was increasing. Consistent with the direction of interest with the other provisions, this declined to 84.6 percent in 1988.

5e. How would you describe the current level of farmer interest in the conservation easements provision of the farm bill in your county:

	Respondent's Agency			All
	SCS	ASCS	CEC	Respondents
Low and Declining				
Number	201	141	73	415
Percent	54.3	33.3	20.8	36.3
Low but Increasing				
Number	122	137	101	360
Percent	33.0	32.4	28.8	31.5
Moderate and Decreasing				
Number	17	39	42	98
Percent	4.6	9.2	12.0	8.6
Moderate and Increasing				
Number	25	98	117	240
Percent	6.8	23.2	33.3	21.0
High but Decreasing				
Number	1	1	9	11
Percent	0.3	0.2	2.6	1.0
High and Increasing				
Number	4	7	9	20
Percent	1.1	1.7	2.6	1.7

Overall, 67.8 percent of respondents said interest in conservation easements was low, 29.6 percent said it was moderate, and 2.7 percent said it was high. Just under a half (45.8 percent) said interest was decreasing, while the remainder (54.2 percent) said it was increasing. The largest single response was the 36.3 percent who said interest in conservation easements was low and declining.

CEC respondents were more likely to see interest as moderate (45.3 percent) compared to ASCS (32.4 percent) or SCS (11.4 percent) respondents and also more likely to view it as high (5.2 percent) relative to ASCS (1.9 percent) and SCS (1.4 percent) respondents. Extension was also more likely to see interest as increasing (64.7 percent) than either ASCS (57.3 percent) or SCS (40.9 percent).

In comparing 1987 and 1988 data, there were 3.5 percent of respondents in 1987 who said interest was high, which dropped to 2.7 percent in 1988; 27.7 percent who said interest was moderate in 1987, which increased to 29.6 percent in 1988; and 68.8 percent who said interest was low in 1987, which dropped slightly to 67.8 in 1988. The direction of interest also changed for this provision. In 1987, there were 61.8 percent who said interest was increasing compared to 54.2 percent in 1988.

6a. Given your experience with farmers, please rate the importance of the level of rental rates for why farmers, after six sign-ups, are not participating in the CRP:

	Respondent's Agency			All Respondents
	SCS	ASCS	CES	
Not Important				
Number	41	62	48	151
Percent	10.5	13.3	13.3	12.4
Somewhat Important				
Number	84	93	95	272
Percent	21.4	20.0	26.3	22.3
Important				
Number	113	110	123	346
Percent	28.8	23.7	34.1	28.4
Very Important				
Number	154	200	95	449
Percent	39.3	43.0	26.3	36.9

More than a third (36.9 percent) of the respondents believed rental rates were a very important reason why farmers were not participating in CRP. Another 28.4 percent said it was important, 22.3 percent said it was somewhat important, and 12.4 percent said it was not important.

There were 68.7 percent of SCS respondents who said rental rates were either very important or important. This compares to 66.7 percent for ASCS and 60.4 percent for CES.

In 1987, there were 40.2 percent of the respondents who said rental rates were a very important reason. This dropped to 36.9 percent in 1988. The percentage of respondents saying rental rates are important dropped from 29.3 percent in 1987 to 28.4 percent in 1988. Those saying rates were only somewhat important or not important increased between 1987 and 1988, from 19.2 percent to 22.3 percent and from 11.3 percent to 12.4 percent, respectively.

6b. Given your experience with farmers, please rate the importance of losing grain bases and other commodity program benefits for why farmers, after six sign-ups, are not participating in the CRP:

	Respondent's Agency			All
	SCS	ASCS	CES	Respondents
Not Important				
Number	32	119	44	195
Percent	8.2	25.8	12.2	16.1
Somewhat Important				
Number	92	152	77	321
Percent	23.6	32.9	21.4	26.5
Important				
Number	129	127	149	405
Percent	33.1	27.5	41.4	33.4
Very Important				
Number	137	64	90	291
Percent	35.1	13.9	25.0	24.0

One-third (33.4 percent) of the respondents believed that the loss of grain bases and other commodity program benefits is an important factor in farmers nonparticipation in the CRP. Slightly less than a quarter (24.0 percent) considered this to be a very important factor, while another quarter (26.5 percent) perceived loss of program benefits as a somewhat important factor. There were 16.1 percent of the respondents who considered this factor to be unimportant.

ASCS respondents tended to downplay the importance of losing grain base and commodity benefits when compared to SCS and CES respondents. More than half (58.7 percent) of ASCS respondents said this factor was either not important or only somewhat important. In contrast, there were only one-third of both the SCS (31.8 percent) and the CES (33.6 percent) respondents who viewed this in the same fashion.

The importance of this factor is fairly constant over time. In 1987, 14.7 percent indicated this to be unimportant. This increased slightly to 16.1 percent in 1988. Very little change is noted in the percentage of respondents who felt this to be a somewhat important factor in 1987 (26.9 percent) and 1988 (26.5 percent). Similarly, approximately one third of the respondents in both years thought this to be important (35.0 percent in 1987 and 33.4 in 1988), and one-quarter indicated this to be a very important factor (23.5 percent in 1987 and 24.0 percent in 1988).

6c. Given your experience with farmers, please rate the importance of understanding eligibility requirements for why farmers, after six sign-ups, are not participating in the CRP:

	Respondent's Agency			
	SCS	ASCS	CES	All Respondents
Not Important				
Number	138	207	104	449
Percent	35.3	45.5	28.7	37.2
Somewhat Important				
Number	186	166	148	500
Percent	47.6	36.5	40.9	41.4
Important				
Number	48	71	83	202
Percent	12.3	15.6	22.9	16.7
Very Important				
Number	19	11	27	57
Percent	4.9	2.4	7.5	4.7

Three-quarters of the respondents said that understanding eligibility requirements was either not important or only somewhat important for farmers who have to date chosen not to participate in CRP. Less than one-fifth (16.7 percent) viewed this to be important, while very few (4.7 percent) thought farmers' lack of understanding to be a very important factor for nonparticipation.

CES was more likely to view understanding eligibility requirements as being more important than their counterparts in SCS and ASCS. Less than a fifth of SCS (17.2 percent) and ASCS (18.0 percent) respondents said this was important or very important. In comparison, almost a third (30.4 percent) of CES respondents said this was important or very important.

The perceived importance of understanding eligibility requirements declined though the year. In 1987, there were 27.1 percent who said this was important or very important. This number declined to 21.4 percent in 1988. In 1987, there were 31.5 percent of the respondents who said this was not important. This increased to 37.2 percent in 1988.

6d. Given your experience with farmers, please rate the importance of their not recognizing that they have eligible acres in explaining why, after six sign-ups, they are not participating in the CRP:

	Respondent's Agency			All Respondents
	SCS	ASCS	CES	
Not Important				
Number	154	191	115	460
Percent	40.1	42.1	31.7	38.3
Somewhat Important				
Number	158	169	138	465
Percent	41.1	37.2	38.0	38.7
Important				
Number	60	79	88	227
Percent	15.6	17.4	24.2	18.9
Very Important				
Number	12	15	22	49
Percent	3.1	3.3	6.1	4.1

In response to whether or not farmers' lack of recognition of eligible acres was important in explaining low CRP participation, the respondents tended to see this as less important. There were 38.3 percent who said it was not important and another 38.7 percent who said it was only somewhat important. Less than one-quarter (23.0 percent) of all respondents considered this to be either an important problem (18.9 percent) or a very important problem (4.1 percent).

CES respondents, however, were more likely to view this as important than were SCS and ASCS respondents. A total of 30.3 percent of CES respondents said this was very important or important. This compares to only 18.7 for SCS and 20.7 for ASCS.

The perceived importance of this issue declined with time. In 1987, 32.0 percent of the respondents said this was not important. This increased to 38.3 percent in 1988. Those saying that recognition of eligible acres is either important or very important declined from 30.9 in 1987 to 23.0 in 1988.

6e. Given your experience with farmers, please rate the importance of restrictive eligibility requirements and the difficulty of getting land into CRP for why farmers, after six sign-ups, are not participating in the CRP:

	Respondent's Agency			All
	SCS	ASCS	CES	Respondents
Not Important				
Number	127	120	83	330
Percent	32.5	26.0	22.8	27.1
Somewhat Important				
Number	126	119	103	348
Percent	32.2	25.8	28.3	28.6
Important				
Number	85	116	122	323
Percent	21.7	25.2	33.5	26.6
Very Important				
Number	53	106	56	215
Percent	13.6	23.0	15.4	17.7

There was little consensus on the importance of restrictive eligibility requirements and the difficulty of getting land into the CRP in contributing to possible CRP nonparticipation. Slightly more than one-quarter of the respondents considered this to be not important (27.1 percent); 28.6 percent perceived this to be somewhat important; and 26.6 percent viewed it as important. Nearly one-fifth (17.7 percent) of the respondents indicated that this was a very important factor.

About one-quarter of ASCS respondents viewed this as a very important reason. There were only 13.6 percent and 15.4 percent of SCS and CES respondents who felt the same way. On the other end of the scale, half of the ASCS and CES respondents (51.8 and 51.1 percent, respectively) indicated that this was either not important or somewhat important, while almost two-thirds (64.7 percent) of the responses from SCS fell into these two categories.

6f. Given your experience with farmers, please rate the importance of there being too much paperwork or long waiting lines for why farmers, after six sign-ups, are not participating in the CRP:

	Respondent's Agency			All Respondents
	SCS	ASCS	CES	
Not Important				
Number	264	270	134	668
Percent	67.3	58.8	36.8	55.0
Somewhat Important				
Number	71	106	136	313
Percent	18.1	23.1	37.4	25.8
Important				
Number	39	60	65	164
Percent	9.9	13.1	17.9	13.5
Very Important				
Number	18	23	29	70
Percent	4.6	5.0	8.0	5.8

Too much paper work or long waiting lines are not perceived as an important reason for farmers not participating in CRP. Only 5.8 percent said this reason was very important, and another 13.5 percent said it was important. The majority (55.0 percent) said this was not important.

CES tended to rank this reason higher in importance than counterparts in other agencies. A quarter (25.9 percent) of CES respondents said this was very important or important. This compares to only 14.5 percent in SCS and 18.1 percent in ASCS. Just over a third (36.8 percent) of CES respondents said this was not important, while over half of ASCS (58.8 percent) and two-thirds of SCS (67.3 percent) respondents said the same.

There has been little change in the perceived importance of this reason during the past year. In 1987, there were 5.6 percent who said this was very important and 12.4 percent who said it was important. These increased slightly in 1988 to 5.8 percent and 13.5 percent, respectively. A majority in both 1987 (53.0 percent) and 1988 (55.0 percent) viewed this as an unimportant reason for nonparticipation in CRP.

6g. Given your experience with farmers, please rate the importance of their disagreement with CRP restrictions on use of land for why farmers, after six sign-ups, are not participating in the CRP:

	Respondent's Agency			All
	SCS	ASCS	CES	Respondents
Not Important				
Number	110	173	52	335
Percent	28.1	37.5	14.3	27.5
Somewhat Important				
Number	140	146	134	420
Percent	35.7	31.7	36.8	34.5
Important				
Number	83	78	112	273
Percent	21.2	16.9	30.8	22.4
Very Important				
Number	59	64	66	189
Percent	15.1	13.9	18.1	15.5

There is also little consensus on the importance of disagreement with CRP restrictions on the use of the land as a reason for farmers not participating in CRP. There were 15.5 percent of the respondents who said this was very important; 22.4 percent who said it was important; 34.5 percent who said it was only somewhat important; and 27.5 percent who said it was not important.

CES, again, had a tendency to see this reason as being more important than counterparts in the other agencies. While almost a fifth (18.1 percent) of CES respondents said this was very important, there were only 13.9 percent in ASCS and 15.1 percent in SCS who felt likewise. Another 30.8 percent of CES respondents said this reason was important. Only 16.9 percent of ASCS and 21.2 percent of SCS said the same. Almost two-fifths (37.5 percent) of ASCS respondents said this was not important. There were 28.1 percent of SCS respondents and only 14.3 percent of CES respondents who also ranked this reason as not important.

In 1987, there were 14.9 percent of all respondents who said this reason was very important. This increased to 15.5 percent in 1988. Yet those saying this was important declined from 27.7 percent in 1987 to 22.4 percent in 1988. Respondents who believed it was not important increased from 21.6 percent in 1987 to 27.5 percent in 1988.

6h. Given your experience with farmers, please rate the importance of their not understanding how CRP relates to other conservation provisions in the farm bill for not participating in the CRP:

	Respondent's Agency			All Respondents
	SCS	ASCS	CES	
Not Important				
Number	116	186	81	383
Percent	29.6	40.6	22.2	31.5
Somewhat Important				
Number	170	182	155	507
Percent	43.4	39.7	42.5	41.7
Important				
Number	69	74	102	245
Percent	17.6	16.2	27.9	20.2
Very Important				
Number	37	16	27	80
Percent	9.4	3.5	7.4	6.6

A lack of understanding about how CRP relates to the other conservation provisions is not keeping many farmers from participating. Only 6.6 percent of the respondents said this was a very important reason and another fifth (20.2 percent) said it was important. There were 41.7 percent who said it was only somewhat important, and 31.5 percent who claimed this reason was not important in explaining CRP participation rates.

ASCS respondents were more likely to minimize the importance of this reason when compared to SCS and CES respondents. While 80.3 percent of ASCS respondents said this was either not important or only somewhat important, there were 73.0 percent of SCS respondents and 64.7 percent of CES respondents who said the same.

The perceived importance of this reason declined between the two surveys. In 1987, there were 8.9 percent who said it was very important, and 27.2 percent who said it was important. These numbers decreased to 6.6 percent and 20.2 percent, respectively, in 1988. Those saying this reason is not important increased from 25.6 percent in 1987 to 31.5 percent in 1988.

6i. Given your experience with farmers, please rate the importance of not getting landlords or tenants to consider participating for why farmers, after six sign-ups, are not participating in the CRP:

	Respondent's Agency			All Respondents
	SCS	ASCS	CES	
Not Important				
Number	85	202	91	378
Percent	21.7	43.9	24.9	31.1
Somewhat Important				
Number	137	146	143	426
Percent	35.0	31.7	39.2	35.0
Important				
Number	130	82	94	306
Percent	33.2	17.8	25.8	25.2
Very Important				
Number	39	30	37	106
Percent	10.0	6.5	10.1	8.7

There is agreement that getting landlords or tenants to consider participating in the CRP is not a very important reason. Only 8.7 percent of the respondents ranked this reason as such. But there was not agreement on just how important this reason is; 25.2 percent said it was important, 35.0 percent said it was somewhat important, and 31.1 percent reported it as being not important.

Again, ASCS was more likely to minimize the importance of this reason. Three-quarters (75.6 percent) of the ASCS respondents said this was either not important or only somewhat important. This compares to 64.1 percent of CES and 56.7 percent of SCS respondents.

There was little change in the perceived importance of getting landlords or tenants to consider participating in CRP. In 1987, there were 8.6 percent who said this was very important, 23.9 percent who said it was important, 35.0 percent who said it was somewhat important, and 32.5 percent who reported it being not important.

6j. Given your experience with farmers, please rate the importance of their receiving conflicting information on CRP for why farmers, after six sign-ups, are not participating in the CRP:

	Respondent's Agency			All Respondents
	SCS	ASCS	CES	
Not Important				
Number	256	333	238	827
Percent	65.1	72.9	65.6	68.2
Somewhat Important				
Number	95	80	79	254
Percent	24.2	17.5	21.8	20.9
Important				
Number	29	31	30	90
Percent	7.4	6.8	8.3	7.4
Very Important				
Number	13	13	16	42
Percent	3.3	2.8	4.4	3.5

There is agreement that receiving conflicting information is not an important reason why farmers are not participating in CRP. Only 3.5 percent said this was very important; 7.4 percent maintained it was important. Almost 9 in 10 (89.1 percent) respondents said this factor was either not important or only somewhat important.

There is also agreement among the agencies on the lack of importance associated with this reason. Only in CES did more than 10 percent of the respondents say this is a very important or important reason. The majority in all three agencies agreed that this reason is not important.

The ranking of this issue remained constant between 1987 and 1988. In 1987, 2.8 percent said it was very important, 7.9 percent maintained it was important, 20.2 percent affirmed it was somewhat important, and 69.1 percent said it was not important.

6k. Given your experience with farmers, please rate the importance of their objecting to contract repayment provisions for why farmers, after six sign-ups, are not participating in the CRP:

	Respondent's Agency			All Respondents
	SCS	ASCS	CES	
Not Important				
Number	147	178	96	421
Percent	37.7	38.8	26.4	34.7
Somewhat Important				
Number	127	125	153	405
Percent	32.6	27.2	42.1	33.4
Important				
Number	80	107	80	267
Percent	20.5	23.3	22.0	22.0
Very Important				
Number	36	49	34	119
Percent	9.2	10.7	9.4	9.8

One in 10 respondents said objections to contract repayment provisions was a very important reason for farmers not to participate in CRP. Just over a fifth (22.0 percent) said it was important, and a third (33.4 percent) claimed it was only somewhat important. The remaining third (34.7 percent) said this was not an important reason for CRP nonparticipation.

Agency rankings of whether the reason was very important or important were essentially the same. CES was more likely to view it as somewhat important (42.1 percent) than either SCS (32.6 percent) or ASCS (27.2 percent).

The reported importance of this issue increased somewhat between 1987 and 1988. In 1987, there were 5.9 percent who said this was very important. This increased to 9.8 percent in 1988. Those saying it was important increased from 18.4 percent in 1987 to 22.0 percent in 1988. Those ranking it as not important decreased from 37.0 in 1987 to 34.7 in 1988.

61. Given your experience with farmers, please rate the importance of difficulties involved in converting cropland into CRP acres in explaining why farmers, after six sign-ups, are not participating in the CRP:

	Respondent's Agency				All Respondents
	SCS	ASCS	CES		
Not Important					
Number	199	225	100		524
Percent	51.3	49.5	27.5		43.4
Somewhat Important					
Number	128	140	138		406
Percent	33.0	30.8	38.0		33.7
Important					
Number	48	65	100		213
Percent	12.4	14.3	27.5		17.7
Very Important					
Number	13	25	25		63
Percent	3.4	5.5	6.9		5.2

Converting cropland into CRP acres was viewed as a very important obstacle by 5.2 percent of the respondents. Another 17.7 percent said this factor was important. A third (33.7 percent) said it was somewhat important, and 43.4 percent said it was not an important reason for farmers' lack of participation in CRP.

More than a third (34.4 percent) of CES respondents ranked this factor as very important or important, while only 15.8 percent of SCS and 19.8 percent of ASCS respondents did similarly. Half of the SCS (51.3 percent) and ASCS (49.5 percent) respondents ranked this as not important, while only a quarter (27.5 percent) of CES respondents gave it the same ranking.

There was little change in the ranked importance of this issue between the two surveys. Those ranking it as very important stayed essentially the same, 5.5 percent in 1987 and 5.2 percent in 1988, while the important ranking dropped slightly from 19.3 percent to 17.7 percent. Those viewing it as not important increased from 40.7 percent in 1987 to 43.4 percent in 1988.

6m. Given your experience with farmers, please rate the importance of farmers waiting for another bonus to be added to CRP payments in future sign-ups for explaining why farmers, after six sign-ups, are not participating in the CRP:

	Respondent's Agency			All
	SCS	ASCS	CES	Respondents
Not Important				
Number	148	211	126	485
Percent	38.0	46.1	35.3	40.3
Somewhat Important				
Number	106	105	121	332
Percent	27.2	22.9	33.9	27.6
Important				
Number	87	97	73	257
Percent	22.4	21.2	20.4	21.3
Very Important				
Number	48	45	37	130
Percent	12.3	9.8	10.4	10.8

A new reason added to the 1988 survey was to assess whether farmers are waiting for another bonus before participating in CRP. Almost a third (32.1 percent) of the respondents said this was either a very important or important reason for not participating in CRP. Another quarter (27.6 percent) said it was somewhat important. The remaining two-fifths (40.3 percent) said it was not important.

There were few agency differences in the ranking of this reason. SCS respondents (34.7 percent) were only slightly more likely to see this as very important or important than counterparts in ASCS (31.0 percent) or CES (30.8 percent). On the other end of the ranking, ASCS (46.1 percent) was more likely to rank this as not important than SCS (38.0 percent) or CES (35.3 percent).

6n. Given your experience with farmers, please rate the other reasons why farmers, after six sign-ups, are not participating in the CRP:

	Respondent's Agency			All Respondents
	SCS	ASCS	CES	
Ten-Year Contract Too Long				
Number	29	31	11	71
Percent	48.3	56.3	29.7	46.7
Area of Highly Erodible Land is Small or Non-Existent				
Number	9	13	17	39
Percent	15.0	23.6	45.9	25.7
Cannot Afford to Idle Additional Acres, Want to Farm Land				
Number	10	6	2	18
Percent	16.7	10.9	5.4	11.8
High Land Values, Land Held for Development				
Number	4	5	4	13
Percent	6.7	9.1	10.8	8.6
Farmers Don't Like Government Interference				
Number	8	0	3	11
Percent	13.3	-	8.1	7.2

These were the five most frequent "other" responses provided by survey participants. All were given a very important or important rating by respondents. The 71 mentions of "10-year contract too long" represent 5.6 percent of all (1,267) survey respondents.

While there were some obvious differences among agencies, the low number of respondents in each case renders these differences somewhat meaningless.

7a. To what extent do you think farmers in your county currently understand the conservation reserve provision in the Conservation Title of the 1985 farm bill:

	Respondent's Agency			All Respondents
	SCS	ASCS	CES	
Do Not Understand				
Number	19	12	13	44
Percent	4.7	2.5	3.5	3.5
Somewhat Understand				
Number	134	116	125	375
Percent	33.3	24.3	33.7	30.0
Pretty Well Understand				
Number	231	312	217	760
Percent	57.3	65.4	58.5	60.8
Fully Understand				
Number	19	37	16	72
Percent	4.7	7.8	4.3	5.8

The perceived level of CRP comprehension appears to be fairly high. Two-thirds (66.6 percent) of the respondents said farmers either fully understand or pretty well understand this conservation provision. The remaining third said they either somewhat understand (30.0 percent) or do not understand (3.5 percent) the CRP program.

ASCS gave farmers the highest level-of-comprehension ranking with 73.2 percent saying farmers fully understand or pretty well understand the provision. ASCS was followed by CES (62.8 percent) and SCS (62.0 percent) for the same categories. A third of SCS (33.3 percent) and CES (33.7 percent) respondents said farmers somewhat understand this provision; only a quarter (24.3 percent) of ASCS respondents said likewise.

The level of comprehension of CRP increased slightly between 1987 and 1988. Those claiming farmers fully understand the provision increased from 4.8 percent to 5.8 percent, while those saying farmers pretty well understand the provision increased from 52.1 percent to 60.8 percent. Those reporting farmers as either somewhat understanding or not understanding declined from 43.1 percent in 1987 to 33.5 percent in 1988.

7b. To what extent do you think farmers in your county currently understand the sodbuster provision in the Conservation Title of the 1985 farm bill:

	Respondent's Agency			All Respondents
	SCS	ASCS	CES	
Do Not Understand				
Number	35	26	30	91
Percent	8.7	5.4	8.1	7.3
Somewhat Understand				
Number	194	180	188	562
Percent	48.1	37.7	50.7	44.9
Pretty Well Understand				
Number	166	254	144	564
Percent	41.2	53.1	38.8	45.0
Fully Understand				
Number	8	18	9	35
Percent	2.0	3.8	2.4	2.8

Respondents said that more than half (52.2 percent) of the farmers either do not understand or only somewhat understand the sodbuster provision. Another 45.0 percent said that farmers understand sodbuster pretty well. Only 2.8 percent said there is full understanding of this provision.

Again, ASCS perceived a higher level of understanding by farmers. More than half (56.9 percent) of ASCS respondents said farmers either fully understand or pretty well understand this provision. This compares to 43.2 percent in SCS and 41.2 percent in CES. On the other end of the scale, SCS (56.8 percent) and CES (58.8 percent) respondents were more likely to say that farmers do not understand or only somewhat understand this provision compared to ASCS respondents (43.1 percent).

The level of understanding surrounding sodbuster increased significantly between 1987 and 1988. Those reporting that farmers either do not understand or only somewhat understand the provision dropped from 81.1 percent in 1987 to 52.2 percent in 1988. Although the number of respondents saying farmers fully understand this provision did not increase that much, 1.5 percent to 2.8 percent, those saying farmers pretty well understand the provision did jump from 17.3 percent to 45.0 percent.

7c. To what extent do you think farmers in your county currently understand the swampbuster provision in the Conservation Title of the 1985 farm bill:

	Respondent's Agency			All
	SCS	ASCS	CES	Respondents
Do Not Understand				
Number	135	77	62	274
Percent	33.8	16.7	16.8	22.3
Somewhat Understand				
Number	195	219	185	599
Percent	48.8	47.5	50.3	48.7
Pretty Well Understand				
Number	68	153	113	334
Percent	17.0	33.2	30.7	27.2
Fully Understand				
Number	2	12	8	22
Percent	.5	2.6	2.2	1.8

Swampbuster is less well understood than the other conservation provisions examined to this point. Only 1.8 percent said farmers fully understand the provision, and just over a quarter (27.2 percent) of respondents said farmers understand it pretty well. There is still almost a quarter of the respondents (22.3 percent) who report that farmers do not understand swampbuster.

SCS respondents attributed a lower level of understanding to this provision than did their counterparts in CES and ASCS. A third (33.8 percent) of SCS respondents said farmers do not understand the provision. This compares to 16.7 percent in ASCS and 16.8 percent in CES. Further, a third (33.2 percent) of ASCS respondents and 30.7 percent of CES respondents said farmers understand this provision pretty well. Only 17.0 percent of SCS respondents said the same.

The perceived level of understanding of swampbuster, like sodbuster, also increased between 1987 and 1988. Respondents saying farmers do not understand this provision decreased from 33.6 percent in 1987 to 22.3 percent in 1988. Somewhat understanding also decreased from 52.0 percent to 48.7 percent. The increase was in the number who said farmers understand this provision pretty well, from 13.0 percent to 27.2 percent. There was essentially no change in the number reporting farmers fully understand the provision, 1.4 percent in 1987 versus 1.8 percent in 1988.

7d. To what extent do you think farmers in your county currently understand the conservation compliance provision in the Conservation Title of the 1985 farm bill:

	Respondent's Agency			All
	SCS	ASCS	CES	Respondents
Do Not Understand				
Number	26	40	27	93
Percent	6.5	8.4	7.3	7.4
Somewhat Understand				
Number	195	201	170	566
Percent	48.4	42.1	45.9	45.3
Pretty Well Understand				
Number	169	219	163	551
Percent	41.9	45.9	44.1	44.1
Fully Understand				
Number	13	17	10	40
Percent	3.2	3.6	2.7	3.2

While only 3.2 percent of the respondents said farmers fully understand the conservation compliance provision, another two-fifths (44.1 percent) said farmers pretty well understand this provision. Still another two fifths (45.3 percent) said farmers somewhat understand it, and 7.4 percent said farmers do not understand the provision.

There is little variation among the agencies regarding perceived understanding of conservation compliance. There were 45.1 percent of SCS, 49.5 percent of ASCS, and 46.8 percent of CES respondents who said farmers pretty well or fully understand this provision. The numbers of SCS, ASCS, and CES respondents reporting that farmers do not understand conservation compliance were all below 10 percent.

The perceived level of understanding of conservation compliance increased in the year between surveys. In 1987, only 21.8 percent of the respondents said farmers pretty well or fully understand this provision. This increased to 47.3 percent in 1988. Those saying farmers do not understand this provision declined from 22.3 percent in 1987 to 7.4 percent in 1988.

7e. To what extent do you think farmers in your county currently understand the conservation easements provision in the Conservation Title of the 1985 farm bill:

	Respondent's Agency			
	SCS	ASCS	CES	All Respondents
Do Not Understand				
Number	277	196	115	588
Percent	70.8	43.8	31.4	48.8
Somewhat Understand				
Number	93	167	184	444
Percent	23.8	37.3	50.3	36.8
Pretty Well Understand				
Number	21	81	64	166
Percent	5.4	18.1	17.5	13.8
Fully Understand				
Number		4	3	7
Percent		.9	.8	.6

Few farmers appear to understand the conservation easements provision. Less than one percent of all respondents said farmers fully understand this provision, and only another 13.8 percent said farmers understand it pretty well. Just over a third (36.8 percent) attributed some understanding of this provision to farmers. Almost half (48.8 percent) of the respondents said farmers do not understand conservation easements.

SCS was the most pessimistic in terms of the level of farmer understanding of conservation easements. Almost all (94.6 percent) of SCS respondents said farmers do not understand or only somewhat understand this provision. A significant majority of SCS respondents (70.8 percent) said farmers do not understand it. Four-fifths (81.1 percent) of ASCS respondents said farmers do not understand or somewhat understand the provision. There were 81.7 percent of CES respondents who said the same.

There was no change in the number reporting full understanding of conservation easements between 1987 and 1988 (0.4 percent versus 0.6 percent). The number saying farmers understand the provision pretty well increased from 8.3 percent to 13.8 percent. Those reporting farmers do not understand the provision decreased slightly from 54.0 percent to 48.8 percent.

8. In your view, to what extent do farmers in your county accept the concept of conservation compliance, that is, that they should conserve soil in exchange for federal farm program benefits:

	Respondent's Agency			All
	SCS	ASCS	CES	Respondents
None Accept				
Number	1	10	3	14
Percent	.3	2.1	.8	1.1
Few Accept				
Number	92	118	93	303
Percent	23.2	24.8	25.3	24.4
Most Accept				
Number	257	325	263	885
Percent	74.8	68.3	71.5	71.3
All Accept				
Number	7	23	9	39
Percent	1.8	4.8	2.4	3.1

Another new question in the 1988 survey was to determine the extent to which farmers, in respondents' minds, accept the idea of conservation compliance, that is, that farmers should conserve soil in exchange for federal farm program benefits. While only 3.1 percent of the respondents said that all farmers in their county accept this idea, a majority (71.3 percent) said that most farmers accept this concept. Another quarter (24.4 percent) said that few accept it, and only 1.1 percent reported that no farmers accept it.

There were few differences between the agencies in terms of perceived acceptance of the conservation compliance idea. While ASCS was more likely to say that all accept it, SCS was more likely to say that most accept it. Yet, CES was close to both of the other agencies in terms of these response categories.

In a recent survey of farmers by *Successful Farming* magazine, this same question produced an "accept" response from 60.7 percent of those polled, a "reject" response from 23.0 percent, and an "undecided" response from 16.3 percent.

9. In your best estimate, and under current conditions, what percentage of the farmers in your county with highly erodible land will have conservation plans developed by January 1, 1990:

	Respondent's Agency			All
	SCS	ASCS	CES	Respondents
0-20 Percent				
Number	9	41	38	88
Percent	2.3	8.6	10.4	7.1
21-40 Percent				
Number	37	53	42	132
Percent	9.4	11.1	11.5	10.7
41-60 Percent				
Number	46	85	70	201
Percent	11.6	17.8	19.1	16.2
61-80 Percent				
Number	101	120	126	347
Percent	25.6	25.1	34.4	28.0
81-100 Percent				
Number	202	179	90	471
Percent	51.1	37.4	24.6	38.0

The development of conservation plans for highly erodible land is important if farmers are to remain eligible for federal farm program benefits. An important issue, then, is the number of farmers who will receive these plans prior to the deadline. Less than two-fifths (38.0 percent) of the respondents estimated that between 81 and 100 percent of the farmers with highly erodible land will obtain plans by the deadline. Another 28 percent said that between 61 and 80 percent of these farmers will have plans. The remaining 34 percent of the respondents estimated that less than 60 percent of the farmers will have plans by the deadline.

SCS respondents clearly were more optimistic than respondents with the other two agencies. Half (51.1 percent) of the SCS respondents said that between 81 and 100 percent of the farmers will have plans by the deadline. This compared to only 37.4 percent in ASCS and 24.6 percent in CES who made similar estimates. A quarter of SCS (25.6 percent) and ASCS (25.1 percent) respondents estimated that between 61 and 80 percent of the farmers will have plans. Roughly a third (34.4 percent) of CES respondents made the same estimate. Only 11.7 percent of the SCS respondents said that 40 percent or less of the farmers will have plans by January 1, 1990. The corresponding figures were 19.7 percent for ASCS and 21.9 percent for CES.

In the recent *Successful Farming* survey, 53.9 percent of those farmers who were aware that they had highly erodible land had already developed a conservation plan so they could remain eligible for federal farm program benefits.

10. Of those farmers in your county with highly erodible land who develop conservation plans, what percentage do you think will fully implement those plans by 1995:

	Respondent's Agency			All
	SCS	ASCS	CES	Respondents
0-20 Percent				
Number	11	36	34	81
Percent	2.8	7.5	9.3	6.5
21-40 Percent				
Number	29	47	49	125
Percent	7.3	9.8	13.4	10.1
41-60 Percent				
Number	62	76	73	211
Percent	15.7	15.9	19.9	17.0
61-80 Percent				
Number	120	139	95	354
Percent	30.3	29.1	26.0	28.5
81-100 Percent				
Number	174	180	115	469
Percent	43.9	37.7	31.4	37.8

The conservation plans that are developed by 1990 must be implemented by 1995 if the farmers are to remain eligible for federal farm program benefits. At issue is an estimate of how much of the plan will be implemented by this next deadline. Just under two-fifths (37.8 percent) of the respondents estimated that 81 to 100 percent of the plans will be implemented. Another 28.5 percent said that 61 to 80 percent of these plans would be implemented. There were 17.0 percent who said 41 to 60 percent of the plans would be implemented and 10.1 percent who said only 21 to 40 percent of the plans would be implemented. Only 6.5 percent of the respondents said that none to 20 percent of the plans in their county would be implemented by 1995.

Again, SCS was more optimistic than the other two agencies in terms of the percentage of plans that would be implemented by 1995. Just under half (43.9 percent) of the SCS respondents said that 81 to 100 percent of all plans would be implemented. This corresponded to 37.7 percent in ASCS and 31.4 percent in CES. Those estimating that 61 to 80 percent of the plans would be implemented were similar for all three agencies: 30.3 percent for SCS, 29.1 percent for ASCS, and 26.0 percent for CES. When considering whether 60 percent or less of the plans would be implemented, there were 25.8 percent in SCS, 33.2 percent in ASCS, and 42.6 percent in CES who felt this would happen.

11a. Please rate the importance of farmers avoiding agencies when they perceive them to be regulatory as a potential barrier to the success of the conservation compliance provision in your county:

	Respondent's Agency			All
	SCS	ASCS	CES	Respondents
Not Important				
Number	34	35	17	86
Percent	8.6	7.4	4.7	7.0
Somewhat Important				
Number	103	136	86	325
Percent	26.1	28.7	23.6	26.3
Important				
Number	142	173	138	453
Percent	35.9	36.5	37.8	36.7
Very Important				
Number	116	130	124	370
Percent	29.4	27.4	34.0	30.0

Three of ten respondents said that farmers avoiding agencies perceived as regulatory is an important barrier to conservation compliance. Another 36.7 percent said that this is an important reason. The remaining third (33.3 percent) said that this was only somewhat important or not important as a barrier to conservation compliance.

CES respondents viewed this as a more important barrier than respondents with the other two agencies. There were 71.8 percent of CES respondents who ranked this as a very important or important barrier. There were 65.3 percent in SCS and 63.9 percent in ASCS who felt the same way. Over a third of SCS (34.7 percent) and ASCS (36.1 percent) respondents said that this was only somewhat important or not important as a barrier. In CES, 28.3 percent offered similar perceptions.

The importance of this potential barrier increased slightly between 1987 and 1988. As noted, 30.0 percent said this was a very important barrier in 1988. It was only 26.9 percent in 1987. Those viewing it as important increased from 34.6 percent to 36.7 percent. Ranking of somewhat important declined from 26.5 percent to 26.3 percent. Those viewing it as not important increased from 6.0 percent to 7.0 percent between 1987 and 1988.

11b. Please rate the importance of the program rules not being strong enough as a potential barrier to the success of the conservation compliance provision in your county:

	Respondent's Agency				All Respondents
	SCS	ASCS	CES		
Not Important					
Number	145	208	159		512
Percent	37.2	44.8	44.0		42.1
Somewhat Important					
Number	152	181	147		480
Percent	39.0	39.0	40.7		39.5
Important					
Number	71	58	45		174
Percent	18.2	12.5	12.5		14.3
Very Important					
Number	22	17	10		49
Percent	5.6	3.7	2.8		4.0

Only 4.0 percent of the respondents said program rules not being strong enough was a very important barrier. Another 14.3 percent said it was an important barrier. Approximately two-fifths (39.5 percent) said it was somewhat important. The largest single response category was the 42.1 percent who said it was not important as a barrier.

SCS respondents were more likely to see the lack of strong program rules as an important barrier than their counterparts in ASCS or CES. Just under a quarter (23.8 percent) of SCS respondents rated this barrier as very important or important. Only 16.2 percent of ASCS and 15.3 percent of CES respondents felt the same about the nature of the rules. On the other end of the scale, only 37.2 percent of SCS respondents said it was not important, while 44.8 percent of ASCS and 44.0 percent of CES respondents selected this category.

Not having strong enough program rules as a barrier to conservation compliance increased in importance between 1987 and 1988. While only 1.7 percent said it was very important in 1987, 4.0 percent did so in 1988. Those ranking this factor as important also increased, from 12.2 percent to 14.3 percent. Those viewing it as not important dropped from 48.8 percent to 42.1 percent during the year.

11c. Please rate the importance of the program rules being too extensive and complicated to be enforced as a potential barrier to the success of the conservation compliance provision in your county:

	Respondent's Agency			
	SCS	ASCS	CES	All Respondents
Not Important				
Number	43	26	28	97
Percent	11.0	5.5	7.7	7.9
Somewhat Important				
Number	112	110	113	335
Percent	28.7	23.3	31.2	27.4
Important				
Number	151	185	159	495
Percent	38.7	39.2	43.9	40.4
Very Important				
Number	84	151	62	297
Percent	21.5	32.0	17.1	24.3

Extensive and complicated program rules were perceived as a very important barrier by 24.3 percent of the respondents. Another 40.4 percent said this was an important barrier. Just over a quarter (27.4 percent) said it was somewhat important, and 7.9 percent said it was not important.

Almost a third of ASCS respondents rated this as a very important barrier. This compares to only 21.5 percent in SCS and 17.1 percent in CES who had the same views. Approximately two-fifths of the respondents from all three agencies viewed this as an important barrier: 38.7 percent for SCS, 39.2 percent for ASCS, and 43.9 percent in CES. SCS respondents were more likely to view this factor as not important (11.0 percent) than either ASCS (5.5 percent) or CES (7.7 percent) respondents.

The importance of extensive and complicated program rules increased as a potential barrier between 1987 and 1988. Those viewing it as very important increased from 20.7 percent to 24.3 percent, and those saying it was important from 37.8 percent to 40.4 percent. This particular barrier was rated as somewhat important by 32.3 percent of respondents in 1987 and 27.4 percent of respondents in 1988. Those viewing it as not important dropped from 9.3 percent to 7.9 percent.

11d. Please rate the importance of farmers not fully understanding the provisions as a potential barrier to the success of the conservation compliance provision in your county:

	Respondent's Agency			All
	SCS	ASCS	CES	Respondents
Not Important				
Number	21	23	32	76
Percent	5.4	4.9	8.8	6.2
Somewhat Important				
Number	128	143	126	397
Percent	32.7	30.5	34.6	32.4
Important				
Number	164	198	159	521
Percent	41.9	42.2	43.7	42.6
Very Important				
Number	78	105	47	230
Percent	19.9	22.4	12.9	18.8

Farmers not fully understanding the provisions was viewed as a very important barrier by 18.8 percent of the respondents. More than two-fifths (42.6 percent) said this was an important barrier. A third (32.4 percent) said it was somewhat important, and 6.2 percent reported it as being not important.

More ASCS (22.4 percent) and SCS (19.9 percent) respondents viewed this as an important barrier than did CES respondents (12.9 percent). Just over two-fifths of the respondents from all three agencies said it was an important barrier. CES respondents (43.4 percent) were more likely to view lack of understanding as only somewhat important or not important than either SCS respondents (38.1 percent) or ASCS respondents (35.4 percent).

Those reporting this as a very important barrier declined from 27.8 percent to 18.8 percent between 1987 and 1988. However, those saying it was important increased from 36.8 percent to 42.6 percent. The somewhat important category increased slightly from 29.3 percent to 32.4 percent, while the not important category stayed the same (6.1 percent versus 6.2 percent).

11e. Please rate the importance of agencies not strongly or uniformly enforcing rules against farmers as a potential barrier to the success of the conservation compliance provision in your county:

	Respondent's Agency			All Respondents
	SCS	ASCS	CES	
Not Important				
Number	41	103	68	212
Percent	10.4	22.0	18.7	17.3
Somewhat Important				
Number	88	151	135	374
Percent	22.4	32.2	37.2	30.5
Important				
Number	147	157	115	419
Percent	37.4	33.5	31.7	34.2
Very Important				
Number	117	58	45	220
Percent	29.8	12.4	12.4	18.0

More than half (52.2 percent) of the respondents said that not strongly or uniformly enforcing the rules would be a very important or important barrier to the success of conservation compliance. Another 3 in 10 respondents said this was somewhat important, and only 17.3 percent said it was not important.

Respondents from SCS were twice as likely to rate this as a very important barrier as were their counterparts in the other two agencies. Ranking this barrier as very important were 29.8 percent of SCS respondents, while only 12.4 percent of those individuals in ASCS and CES did the same. SCS was also more likely to see this as an important barrier. There were 37.4 percent of SCS respondents who ranked it this way; 33.5 percent of ASCS respondents and 31.7 percent of CES respondents did likewise. More than a fifth (22.0 percent) of ASCS respondents said this was not important, and 18.7 percent of CES respondents gave it the same ranking. However, only 1 in 10 (10.4 percent) SCS respondents ranked it as not important.

The importance of this barrier increased between 1987 and 1988. In 1987, there were 13.2 percent who said it was very important and 28.0 percent who reported it as important. This increased to 18.0 percent and 34.2 percent, respectively. Those viewing not strongly or uniformly enforcing the rules as an unimportant barrier dropped from 28.4 percent in 1987 to 17.3 percent in 1988.

11f. Please rate the importance of there not being enough conservation farm planning as a potential barrier to the success of the conservation compliance provision in your county:

	Respondent's Agency			All
	SCS	ASCS	CES	Respondents
Not Important				
Number	104	120	77	301
Percent	26.5	25.5	21.4	24.6
Somewhat Important				
Number	153	197	155	505
Percent	39.0	41.9	43.1	41.3
Important				
Number	101	116	105	322
Percent	25.8	24.7	29.2	26.4
Very Important				
Number	34	37	23	94
Percent	8.7	7.9	6.4	7.7

Not being enough conservation farm planning as a barrier to conservation compliance was viewed as very important by 7.7 percent of the respondents. Another quarter (26.4 percent) said this was important. Two-fifths (41.3 percent) said this was only somewhat important, and another quarter (24.6 percent) said it was not important.

There was little variation in the responses among agencies relative to the importance of this potential barrier. None had more than 10 percent rating it as very important, and close to a quarter of the respondents from each agency rated it as important. While a quarter of SCS (26.5 percent) and ASCS (25.5 percent) respondents rated it not important, only a fifth (21.4 percent) of CES respondents did the same.

The importance of not having enough conservation farm planning as a potential barrier to the success of conservation compliance changed relatively little between 1987 and 1988. In 1987 there were 13.3 percent who said this was very important. This dropped to 7.7 percent in 1988. Those saying it was important decreased slightly from 24.6 percent to 26.4 percent. There was also a slight decrease in those reporting it as not important, 26.3 percent in 1987 versus 24.6 percent in 1988.

11g. Please rate the importance of there not being enough on-site inspection for compliance as a potential barrier to the success of the conservation compliance provision in your county:

	Respondent's Agency			All
	SCS	ASCS	CES	Respondents
Not Important				
Number	35	121	68	224
Percent	8.9	25.7	18.7	18.3
Somewhat Important				
Number	92	175	156	423
Percent	23.5	37.2	43.0	34.5
Important				
Number	134	129	105	368
Percent	34.2	27.4	28.9	30.0
Very Important				
Number	131	45	34	210
Percent	33.4	9.6	9.4	17.1

There were 17.1 percent who said that not enough on-site inspection would be a very important barrier to the success of conservation compliance. Three in 10 respondents said this was an important barrier, and another third (34.5 percent) said it was somewhat important. There were 18.3 percent who said this was not important as a barrier to the success of conservation compliance.

While 1 in 3 (33.4 percent) SCS respondents said this was a very important barrier, less than 1 in 10 respondents from ASCS (9.6 percent) and CES (9.4 percent) gave it the same ranking. Another third (34.2 percent) of the SCS respondents said this was an important barrier. Just over a quarter of ASCS (27.4 percent) and CES (28.9 percent) respondents reported it as an important barrier. One in 4 (25.7 percent) ASCS respondents said this was not important as a potential barrier. There were 18.7 percent of CES respondents agreeing with this assessment, but only 8.9 percent of SCS respondents gave it an unimportant ranking.

The perceived importance of this potential barrier increased between 1987 and 1988. Those ranking it as very important increased from 14.9 percent to 17.1 percent, and those viewing it as important went from 25.5 percent in 1987 to 30.0 percent in 1988. Those viewing it as not important dropped from 26.0 percent to 18.3 percent.

11h. Please rate the importance of farmers electing not to participate in federal farm programs if crop prices rise significantly as a potential barrier to the success of the conservation compliance provision in your county:

	Respondent's Agency			All Respondents
	SCS	ASCS	CES	
Not Important				
Number	31	16	22	69
Percent	8.0	3.4	6.1	5.7
Somewhat Important				
Number	78	47	57	182
Percent	20.1	10.0	15.9	14.9
Important				
Number	109	145	130	384
Percent	28.0	30.8	36.2	31.5
Very Important				
Number	171	263	150	584
Percent	44.0	55.8	41.8	47.9

Crop prices rising significantly was added as a potential barrier to the 1988 survey. Almost half of the respondents (47.9 percent) said this would be a very important barrier to the success of conservation compliance. Another 31.5 percent said it would be important. Only 5.7 percent of all respondents viewed this as not important.

ASCS respondents were more likely to view this as a very important barrier to the success of conservation compliance. More than half (55.8 percent) of ASCS respondents said that crop prices rising significantly would be a very important barrier. They were followed by 44.0 percent of SCS respondents and 41.8 percent of CES respondents who said the same. More than a third (36.2 percent) of CES respondents gave this potential barrier an important ranking, as did 30.8 percent of ASCS and 28.0 percent of SCS respondents. Only 3.4 percent of ASCS, 6.1 percent of CES, and 8.0 percent of SCS respondents said this would not be an important barrier.

iii. Please rate the importance of other factors as a potential barrier to the success of the conservation compliance provision in your county:

	Respondent's Agency			All Respondents
	SCS	ASCS	CES	
Don't Like Red Tape, Government Interference				
Number	1	14	0	15
Percent	5.5	60.9	-	28.8
Not Enough Personnel, Volume of Workload				
Number	8	3	2	13
Percent	44.4	13.0	18.2	25.0
Cost of Compliance				
Number	3	5	1	9
Percent	16.7	21.8	9.1	17.3
Continuous Changes in Program				
Number	5	1	3	9
Percent	27.8	4.3	27.3	17.3
Lack of Eligible Land				
Number	1	0	5	6
Percent	5.5	-	45.5	11.5

These were the five most frequent "other" responses provided by survey participants. All were given a very important or important rating by respondents. The 15 mentions of "don't like red tape, government involvement" represent 1.2 percent of all survey respondents.

12. In your view, which of the following provisions is likely to pose the greatest problem from the standpoint of implementation in your county:

	Respondent's Agency			All
	SCS	ASCS	CES	Respondents
Conservation Compliance				
Number	275	270	215	760
Percent	69.1	57.7	59.2	61.8
Swampbuster				
Number	77	90	63	230
Percent	19.3	19.2	17.4	18.7
Sodbuster				
Number	46	108	85	239
Percent	11.6	23.1	23.4	19.4

Judging whether conservation compliance, sodbuster, or swampbuster would pose the greatest implementation problems in the respondent's county was another new question added in 1988. Almost two-thirds (61.8 percent) of the respondents said conservation compliance would pose the greatest implementation problem. The remaining respondents were just about evenly split between sodbuster (19.4 percent) and swampbuster (18.7 percent).

SCS respondents were more likely to choose conservation compliance. While 69.1 percent of SCS respondents selected this provision, only 57.7 percent of ASCS respondents and 59.2 percent of CES respondents did the same. An equal percentage of SCS (19.3 percent) and ASCS (19.2 percent) respondents choose swampbuster. Only 17.4 percent of CES respondents selected swampbuster. Almost a quarter of ASCS (23.1 percent) and CES (23.4 percent) respondents choose sodbuster, while only 11.6 percent of SCS respondents did the same.

13a. Is a group planning process being used in your county to complete the planning requirements associated with conservation compliance:

	Respondent's Agency			All Respondents
	SCS	ASCS	CES	
Don't Know, Not My Responsibility				
Number	2	84	110	196
Percent	.5	17.7	29.8	15.8
No				
Number	291	176	95	562
Percent	73.7	37.1	25.7	45.4
Yes				
Number	102	214	164	480
Percent	25.8	45.1	44.4	38.8

Group planning has been proposed as a means of more efficiently meeting the workload posed by implementation of the conservation provisions. In 1988, respondents were asked if group planning was being used in their respective county to meet the planning requirements associated with conservation compliance. Overall, 38.8 percent said group planning was being used, 45.4 percent said it was not, and 15.8 percent said they did not know or it was not their responsibility to know.

ASCS (45.1 percent) and CES (44.4 percent) respondents were more likely to say group planning was being used than SCS (25.8 percent) respondents. Almost three-quarters (73.7 percent) of SCS respondents said it was not being used in their counties. Only 37.1 percent of ASCS and 25.7 percent of CES respondents said group planning was not being used. However, 3 of 10 (29.8 percent) CES respondents said they did not know or that it was not their responsibility to know. There were 17.7 percent of ASCS respondents who gave this answer, and less than one percent (0.5 percent) of SCS respondents who said the same.

13b. If group planning is being used in your county, how effective is the group planning process:

	Respondent's Agency			All Respondents
	SCS	ASCS	CES	
Not Effective				
Number	12	10	7	29
Percent	11.5	4.7	4.3	6.1
Somewhat Effective				
Number	66	162	120	348
Percent	63.5	76.1	74.1	72.7
Very Effective				
Number	26	41	35	102
Percent	25.0	19.2	21.6	21.3

Those respondents using group planning in their county were asked to assess the effectiveness of this technique. Only 21.3 percent said it was very effective, while the majority, 72.7 percent, reported it as somewhat effective. There were 6.1 percent of the respondents using group planning who said it was not effective.

A quarter (25.0 percent) of the SCS respondents using group planning reported it to be very effective. There were 19.2 percent of ASCS and 21.6 percent of CES respondents who gave it the same evaluation. Approximately three-quarters of ASCS (76.1 percent) and CES (74.1 percent) respondents using group planning said it was somewhat effective. Just under two thirds (63.5 percent) of SCS respondents evaluated it as somewhat effective. Twice as many SCS (11.5 percent) respondents as those in ASCS (4.7 percent) and CES (4.3 percent) said this technique was not effective.

14. Are computers being used in your county to complete the planning requirements associated with conservation compliance:

	Respondent's Agency			All Respondents
	SCS	ASCS	CES	
Don't Know				
Number	2	101	137	240
Percent	.5	21.4	37.4	19.4
No				
Number	145	172	82	399
Percent	36.5	36.4	22.4	32.3
Yes				
Number	250	200	147	597
Percent	63.0	42.3	40.2	48.3

Respondents were asked if computers were being used in their counties as part of the planning process associated with conservation compliance. Almost half (48.3 percent) said that computers were being used. Roughly a third (32.3 percent) replied that computers were not part of the conservation compliance planning process. The remaining fifth (19.4 percent) said that they did not know if computers were part of this planning process.

SCS respondents were much more likely to recognize if computers were being used in the planning process. There were 63.0 percent of the SCS respondents who said yes, 36.5 percent who said no, and less than 1.0 percent (0.5 percent) who did not know. ASCS had 42.5 percent of its respondents saying computers were being used, 36.4 percent saying they were not, and a fifth (21.4 percent) who did not know. While two-fifths (40.2 percent) of CES respondents said computers were being used and 32.3 percent said they were not, there were 37.4 percent who did not know about the use of this technology in the planning process.

15. Have the highly erodible land determinations been completed in your county:

	Respondent's Agency			All Respondents
	SCS	ASCS	CES	
Don't Know, Not My Responsibility				
Number	1	30	95	126
Percent	.3	6.3	26.1	10.2
No				
Number	182	215	71	468
Percent	45.8	45.1	19.5	37.8
Yes				
Number	214	232	198	644
Percent	53.9	48.6	54.4	52.0

Highly erodible land determinations are an important step in implementing the conservation compliance provision. Respondents were asked if this land assessment had been completed in their county. More than half (52.0 percent) said these determinations had been completed. Another 37.8 percent said that highly erodible land determinations had not been completed as yet. The remaining 10.2 percent said that they did not know if this assessment had been completed or that it was not their responsibility to know.

More than half of the SCS (53.9 percent) and CES (54.4 percent) respondents said the highly erodible land determinations had been completed. There were 48.6 percent of the ASCS respondents who also said that this process was complete. Just over two-fifths of SCS (45.8 percent) and ASCS (45.1 percent) respondents said the assessments were not complete. Only one-fifth (19.5 percent) of CES respondents said this was the case. However, a quarter (26.1 percent) of CES respondents said they did not know or that these land determinations were not their responsibility. Only one SCS (0.3 percent) respondent answered in this way, while 6.3 percent of ASCS respondents gave this response.

In the recent *Successful Farming* survey, 52.0 percent of the farmers polled said they had been informed that they have highly erodible land; 13.3 percent said they need to determine yet if they have highly erodible land.

16. What percentage of the conservation planning task associated with the compliance provisions has been completed to date in your county:

	Respondent's Agency			All Respondents
	SCS	ASCS	CES	
0-20 Percent				
Number	208	136	73	417
Percent	52.8	28.9	19.8	33.8
21-40 Percent				
Number	109	113	67	289
Percent	27.7	24.0	18.2	23.4
41-60 Percent				
Number	49	70	37	156
Percent	12.4	14.9	10.1	12.7
61-80 Percent				
Number	9	39	20	68
Percent	2.3	8.3	5.4	5.5
81-100 Percent				
Number	16	17	12	45
Percent	4.1	3.6	3.3	3.6
Don't Know				
Number	3	96	159	258
Percent	.8	20.4	43.2	20.9

Implementing the conservation compliance provision requires a number of planing steps and processes. Respondents were asked to estimate the percentage of this planing process that had been completed in their county. Less than 10 percent (9.1 percent) said it was between 61 and 100 percent completed. There were 12.7 percent who said it was between 41 and 60 percent completed. Another 23.4 percent estimated that planning in their county was between 21 and 40 percent completed. The largest response category was the 33.8 percent who said this process was between 0 and 20 percent completed. Another fifth (20.9 percent) of the respondents did not know the status of this process.

There was little interagency variation on this scale except at the extremes. At one end, 52.8 percent of SCS respondents said the process was between 0 and 20 percent completed. This compared to only 28.9 percent in ASCS and 19.8 percent in CES who made the same evaluation. At the other end of the scale, less than 1.0 percent (0.8 percent) of SCS respondents said they did not know. However, one-fifth (20.4 percent) of ASCS respondents and more than two-fifths (43.2 percent) of CES respondents did not know the status of the planing process. Only 6.4 percent of SCS respondents said the planning process was between 61 and 100 percent completed; another 40.1 percent said it was between 21 and 60 percent completed. The comparable statistics for ASCS were 11.9 percent and 38.9 percent, respectively. In CES, 8.7 percent said it was 61 to 100 percent completed, and 28.3 percent said they were 21 to 60 percent finished.

The recent *Successful Farming* survey indicated that 18.4 percent of the farmers polled needed help yet in developing a plan, while 18.7 percent needed help with implementing their plans. In addition, 78.4 percent said the plans they have represent "a reasonably workable system" for bringing highly erodible land into compliance, while 13.2 percent said their plans were not reasonable.

17. In your judgement, are farmers in your county thinking that the timetable for implementation of the conservation compliance provision will change:

	Respondent's Agency				All Respondents
	SCS	ASCS	CES		
Don't Know					
Number	75	128	107	310	
Percent	19.0	26.7	29.0	24.9	
No					
Number	86	145	114	345	
Percent	21.8	30.2	30.9	27.7	
Yes					
Number	234	207	148	589	
Percent	59.2	43.1	40.1	47.3	

Almost half (47.3 percent) of the respondents said farmers in their county believed the timetable for implementing the conservation compliance provision will be changed. Just over a quarter (27.7 percent) said farmers did not believe it would change. Another quarter (24.9 percent) said they did not know what farmers thought about changes in the implementation timetable.

SCS respondents were much more likely to perceive that farmers believed there would be a change in the timetable. More than half (59.2 percent) gave this response. Only two-fifths of ASCS (43.1 percent) and CES (40.1 percent) respondents had this perception of farmer opinion. Three in 10 ASCS (30.2 percent) and CES (30.9 percent) respondents said farmers believed that the timetable would not change. Only one-fifth (21.8 percent) of SCS respondents had this perception. While less than one-fifth (19.0 percent) of SCS respondents did not know, more than a quarter (26.7 percent) of ASCS respondents and 29.0 percent of CES respondents said they did not know how farmers felt about this issue.

18. In your judgement, are farmers in your county thinking that enforcement of the conservation compliance provisions will be relaxed:

	Respondent's Agency			All Respondents
	SCS	ASCS	CES	
Don't Know				
Number	82	102	94	278
Percent	20.7	21.3	25.6	22.4
No				
Number	56	107	103	266
Percent	14.1	22.3	28.1	21.4
Yes				
Number	258	270	170	698
Percent	65.2	56.4	46.3	56.2

More than half (56.2 percent) of the respondents said farmers in their county believed that the enforcement of conservation compliance will be relaxed. Just over a fifth (21.4 percent) of the respondents did not believe this to be the case. Another 22.4 percent did not know farmer opinions on this issue.

SCS respondents were more likely to perceive that farmers believed that enforcement would be relaxed. Almost two-thirds (65.2 percent) said this was their evaluation of the situation. More than half (56.4 percent) of ASCS respondents said farmers believed enforcement would be relaxed, and 46.3 percent of CES respondents felt this way. Those saying farmers did not believe enforcement would be relaxed were 14.1 percent, 22.3 percent, and 28.1 percent of SCS, ASCS, and CES respondents, respectively. A quarter (25.6 percent) of CES respondents said they did not know what farmers believed on this issue. There were 21.3 percent of ASCS respondents and 20.7 percent of SCS respondents who gave this same answer.

19. There is some discussion about the 1990 farm bill, or a subsequent farm bill, containing a cross-compliance provision relating to nonpoint-source water pollution. If farmers want to remain eligible for USDA programs, they will have to adopt the necessary best management practices to reduce off-farm pollution of surface water and groundwater. To what extent do you think farmers in your county would support such a water quality compliance provision:

	Respondent's Agency			All Respondents
	SCS	ASCS	CES	
Very Opposed				
Number	52	93	35	180
Percent	12.9	19.6	9.6	14.5
Opposed				
Number	214	224	161	599
Percent	53.2	47.3	44.0	48.2
Supportive				
Number	133	149	162	444
Percent	33.1	31.4	44.3	35.7
Very Supportive				
Number	3	8	8	19
Percent	.7	1.7	2.2	1.5

Overall, only 1.5 percent of the respondents said farmers in their county would be very supportive of a water quality cross-compliance provision. Over a third (35.7 percent), however, said farmers would be supportive. A little less than half (48.2 percent) said farmers would oppose such a provision, and 14.5 percent said farmers would be very opposed to the provision.

CES respondents were more likely to perceive support for a water quality cross-compliance provision than respondents in the other two agencies. There were 46.5 percent of CES respondents who said farmers would be very supportive or supportive of such a provision. SCS respondents suggested that 33.8 percent of farmers feel this way, while 33.1 percent of ASCS respondents offered the same response. On the other end of the spectrum, two-thirds of ASCS (66.9 percent) and SCS (66.1 percent) respondents said farmers would be opposed or very opposed to such a provision. Just over half (53.6 percent) of CES respondents said this would be the case.

In the recent *Successful Farming* survey, 23.0 percent of the farmers polled said concern about groundwater quality had affected the way they use fertilizer nitrogen. Of these 23.0 percent of farmers, 59.5 percent said they use less N, 37.1 percent said they apply N differently, and 19.5 percent said they were using a different N source.

20. In general, how would you describe the current surface water and/or groundwater pollution problem in your county:

	Respondent's Agency			
	SCS	ASCS	CES	All Respondents
Nonexistent				
Number	9	19	13	41
Percent	2.2	4.0	3.5	3.3
Slight				
Number	99	165	177	441
Percent	24.4	34.3	48.0	35.1
Moderate				
Number	180	232	139	551
Percent	44.4	48.2	37.7	43.9
Serious				
Number	104	54	33	191
Percent	25.7	11.2	8.9	15.2
Severe				
Number	13	11	7	31
Percent	3.2	2.3	1.9	2.5

Surface water and groundwater pollution problems do not appear to be a major issue among respondents. Only 17.7 percent said that water pollution was a severe or serious problem in their county. Two-fifths (43.9 percent) said it was a moderate problem, and another 35.1 percent said it was only a slight problem. There were 3.3 percent of the respondents who said water quality problems were nonexistent in their county.

There were 28.9 percent of the SCS respondents who said water pollution was severe or serious in their county. This compared to only 13.5 percent in ASCS and 10.8 percent in CES who had the same evaluation. Almost half (48.2 percent) of the ASCS respondents said water pollution was a moderate problem. Close to this was the 44.4 percent of SCS respondents who evaluated water pollution as moderate. In CES, 37.7 percent of respondents evaluated the problem thusly. Those saying it was a slight problem were 48.0 percent in CES, 34.3 in ASCS, and 24.4 percent in SCS. No agency had more than 4 percent of it's respondents saying the problem was nonexistent.

21. To what extent do you think agricultural activities contribute to the water pollution problem in your county:

	Respondent's Agency			All
	SCS	ASCS	CES	Respondents
Don't Know				
Number	10	15	11	36
Percent	2.5	3.1	3.0	2.9
No Cause				
Number	4	35	24	63
Percent	1.0	7.3	6.5	5.0
Minor Cause				
Number	152	271	231	654
Percent	37.4	56.5	62.6	52.1
Major, But Not Sole Cause				
Number	228	150	100	478
Percent	56.2	31.3	27.1	38.1
Sole Cause				
Number	12	9	3	24
Percent	3.0	1.9	.8	1.9

Agriculture is pointed to as a major source of water quality problems. Respondents were asked the extent agricultural activities contribute to water pollution problems in their county. Only 1.9 percent said it was the sole cause of county water pollution problems. There were 38.1 percent who said it was a major cause, but not the sole cause of these problems. Just over half (52.1 percent) said agricultural activities were a minor cause of these problems. One in 20 respondents said agriculture did not contribute to water quality problems, and 2.9 percent of respondents did not know what agriculture's contribution might be.

SCS was much more likely to attribute water quality problems to agriculture. Almost 6 of 10 (59.2 percent) SCS respondents said agriculture was either a major or sole cause. This compared to only 33.2 percent in ASCS and 27.9 percent in CES who had the same assessment. While only 37.4 percent of SCS said agriculture was a minor cause, 56.5 percent of ASCS and 62.6 percent of CES respondents offered this evaluation. There were 6.5 percent of CES, 7.3 percent of ASCS, and 1.0 percent of SCS respondents who said agriculture did not cause water quality problems in their county.

22. How would you describe the current level of interest among farmers in your county in low-input (sustainable, alternative) agriculture:

	Respondent's Agency			All
	SCS	ASCS	CES	Respondents
None				
Number	21	40	14	75
Percent	5.3	8.6	3.8	6.1
Little				
Number	132	169	95	396
Percent	33.4	36.5	25.9	32.3
Some				
Number	150	179	151	480
Percent	38.0	38.7	41.1	39.2
Moderate				
Number	74	65	83	222
Percent	18.7	14.0	22.6	18.1
High				
Number	18	10	24	52
Percent	4.6	2.2	6.5	4.2

Respondents were asked to estimate the level of interest among farmers in their county relative to low-input, alternative, or sustainable agriculture. Only 4.2 percent said such interest was high; 18.1 percent said it was moderate. Another 39.2 percent said there was some interest, while 32.3 percent said there was little interest. There were 6.1 percent who said there was no interest at all.

In CES, there were 29.1 percent who said interest was high or moderate. This compared to 16.2 percent in ASCS and 23.3 percent in SCS with similar assessments. While two-thirds (67.0 percent) of CES respondents said there was little or some interest, three-quarters (75.2 percent) of ASCS respondents and 71.4 percent of SCS respondents offered this evaluation. Assessments of no interest ranged from 8.6 percent in ASCS to 3.8 percent in CES.

23. To what extent have the agencies in your county cooperated with each other in promoting and implementing the CRP and other provisions in the Conservation Title:

	Respondent's Agency			All
	SCS	ASCS	CES	Respondents
Less Than Other Programs				
Number	29	21	17	67
Percent	7.1	4.4	4.6	5.4
About the Same as Others				
Number	174	216	196	586
Percent	42.9	45.3	53.4	46.9
More Than Other Programs				
Number	203	240	154	597
Percent	50.0	50.3	42.0	47.8

An important dimension of the conservation provisions in the 1985 Food Security Act is the improved cooperation between and among USDA agencies required for effective implementation. Respondents were asked about the extent to which agencies in their county were cooperating with each other in implementing the conservation provisions. Just under half (47.8 percent) said the level of cooperation was more than what has occurred with other programs. About the same number (46.9 percent) said the level of cooperation had not changed. There were 5.4 percent who said the level of cooperation was less than with other programs.

Half of the SCS (50.0 percent) and ASCS (50.3 percent) respondents said that cooperation increased. Only 42.0 percent of CES respondents offered the same assessment. More than half (53.4 percent) of the CES respondents said the level of cooperation was no different than with other programs. Just over two-fifths (42.9 percent) of SCS respondents and 45.3 percent of ASCS respondents also said the level of cooperation had not changed. Those saying the level of cooperation had declined were 7.1 percent in SCS, 4.4 percent in ASCS, and 4.6 percent in CES.

The level of interagency cooperation appeared to have increased slightly between 1987 and 1988. In 1987, there were 43.6 percent of the respondents who said cooperation had increased. As noted, there were 47.8 percent who reported this in 1988. Those saying there had been no change decreased from 50.7 percent in 1987 to 46.9 percent in 1988. There was essentially no change in the number reporting less cooperation; 5.6 percent in 1987 versus 5.4 percent in 1988.

24. In general, how would you characterize implementation of the conservation provisions in the 1985 farm bill in your county to this point in time:

	Respondent's Agency			All
	SCS	ASCS	CES	Respondents
Highly Unsuccessful				
Number	7	11	7	25
Percent	1.7	2.3	1.9	2.0
Moderately Unsuccessful				
Number	34	55	50	139
Percent	8.4	11.5	13.7	11.2
Moderately Successful				
Number	305	350	271	926
Percent	75.7	73.2	74.5	74.4
Highly Successful				
Number	57	62	36	155
Percent	14.1	13.0	9.9	12.4

This new question for the 1988 survey attempted to get an overall assessment of the implementation of the conservation provisions in the respondent's county. There were 12.4 percent of the respondents who reported implementation as highly successful. A majority, 74.4 percent, said it was moderately successful. Just over 1 in 10 respondents (11.2 percent) said it was moderately unsuccessful, and 2.0 percent said it was highly unsuccessful.

There is little variation among agencies in their assessment, although SCS respondents were slightly more optimistic in their assessment. While 14.1 percent of SCS respondents said it was highly successful, 13.0 percent in ASCS and 9.9 percent in CES offered the same assessment. One of 10 (10.1 percent) SCS respondents said it was highly or moderately unsuccessful. In ASCS, there were 13.8 percent of the respondents who gave these answers, while 15.5 percent of CES respondents believed implementation success to date fell into one of these unsuccessful categories.

25. Which of the following factors do you have the greatest need to implement the conservation provisions in your county:

	Respondent's Agency			All Respondents
	SCS	ASCS	CES	
More Staff to Work With Farmers				
Number	272	163	114	549
Percent	69.2	40.9	34.1	48.8
More Factual Information and Educational Materials				
Number	40	106	102	248
Percent	10.2	26.6	30.5	22.0
More Training of Staff on Implementing Provisions				
Number	32	74	25	131
Percent	8.1	18.5	7.5	11.6
More Cooperation and Coordination Between Agencies				
Number	22	19	39	80
Percent	5.6	4.8	11.7	7.1
More Funds for Equipment				
Number	9	9	21	39
Percent	2.3	2.3	6.3	3.5
Simpler Program				
Number		10		10
Percent		2.5		.9
Completed Soil Surveys				
Number	4	4		8
Percent	1.0	1.0		.7
Change Eligibility				
Number			7	7
Percent			2.1	.6
Other Factors				
Number	13	3	20	36
Percent	3.3	0.8	6.0	3.2
None Needed				
Number	1	11	6	18
Percent	0.3	2.8	1.8	1.6

This question, which was open-ended, attempted to assess needs agency personnel may have for implementing the conservation provisions. Most responses fell into the category of additional staff to work with farmers. Approximately half (48.8 percent) of all responses listed this need. The next most often listed response was the need for more factual information and educational materials with 22.0 percent. More training for staff on how to implement the provisions was mentioned by 11.6 percent of the respondents. More cooperation and coordination between and among the agencies was a need cited by 7.1 percent of the respondents.

More than two-thirds (69.2 percent) of SCS personnel responding to this question listed more staff. This need was also the most often cited by ASCS (40.9 percent) and CES (34.1 percent) personnel responding to this question. An almost equal number (30.5 percent) of CES personnel listed the need for more factual information and educational materials. This need came out much lower, relative to the most often cited need, for ASCS (26.6 percent) and for SCS (10.2 percent). CES respondents were also twice as likely to cite the need for more cooperation and coordination than their SCS or ASCS counterparts: 11.7 percent versus 5.6 percent and 4.8 percent, respectively. Training for staff was a higher need for ASCS (18.5 percent) than for either SCS (8.1 percent) or CES (7.5 percent).

26. Do you have any thoughts or suggestions about what ought to happen to the land enrolled in the CRP once the 10-year contracts expire?

1. Offer extension of CRP contracts, possibly with adjustments in rental rates to account for inflation, etc.
Number: 207 Percent: 16.3 (of all 1,267 respondents)
2. Keep land in CRP out of production once contracts expire.
Number: 167 Percent: 13.2
3. Allow use of the land, but under the rules that will be in effect--sodbuster, conservation compliance.
Number: 152 Percent: 12.0
4. Let owners decide how land is to be used.
Number: 92 Percent: 7.3
5. Use of land will depend upon agricultural markets and economy generally.
Number: 42 Percent: 3.3

Obviously, there was considerable sentiment among respondents to build some degree of permanency into the CRP. At the same time a minority segment of the sample population seemed less concerned about the need to keep highly erodible land out of production, or at least about the government's need to offer incentives or disincentives to achieve this conservation goal.

Well over half of all survey respondents offered feedback on this question. In all there were 27 different responses provided, including the five most frequently mentioned items listed above. A number of the additional responses/suggestions were positive toward the CRP and its extension "encourage that land in trees to stay in trees," "expand or refine program," "promote wildlife habitat," "government should buy highly erodible land." A few were less positive: "put back into production," "farmers fear land won't be allowed to go back into production." Perhaps the most important messages here had to do with the uncertainty about the economy some years hence, when the CRP contracts expire whether or not land enrolled in the CRP will be needed for production of agricultural commodities; whether or not there will be policies in place to perpetuate the conservation goals involved; and whether or not these policies will be in place soon enough to give farmers the time to plan adequately for whatever program transition options might be available to them.

27. Is there anything else you would like to say about the conservation provisions of the 1985 farm bill or their implementation?

1. Lack of staff to implement conservation provisions.
Number: 73 Percent: 5.8 (of all 1,267 respondents)
2. Conservation provisions a good first step; keep in force; may need some refinement.
Number: 72 Percent: 5.7
3. Don't change rules and regulations so much during implementation.
Number: 54 Percent: 4.3
4. Too much paperwork; programs too complex for amount of conservation work getting done.
Number: 38 Percent: 3.0
5. A better educational effort must be initiated and maintained.
Number: 30 Percent: 2.4
6. There are problems with the swampbuster provision.
Number: 30 Percent: 2.4
7. Prefer voluntary programs, not regulatory.
Number: 28 Percent: 2.2
8. Be flexible on enforcement of conservation compliance; work with farmer to develop practical, economic plan.
Number: 23 Percent: 1.9
9. Conservation Title of Food Security Act is bad legislation; should be changed or eliminated.
Number: 21 Percent: 1.7
10. More cooperation needed between ASCS, CES, and SCS.
Number: 20 Percent: 1.6

About half of all survey participants offered comments in response to this question. The result was many messages, some positive, some negative. A good many of the 86 different responses cataloged had to do more with respondents' views of the provisions and their implementation as opposed to what farmers might be thinking or saying: agreement or disagreement with particular points in the legislation or implementing rules, compliments or criticism of the job a particular agency has done in implementing the provisions to date, the timetable for implementation, and so forth.

Passage and implementation of the Conservation Title has obviously posed a real challenge for the agencies involved. Employees have been asked to do a lot, in new and different ways in a relatively short time span. Many have accepted the challenge and are doing their best to make the new programs work. Others have reacted to it all in much less positive fashion, which has negative implications for interagency relations as well as the connotations conveyed to farmers by some local USDA program administrators.

WHITE PAPER



AMERICAN AGRICULTURE AT THE CROSSROADS
A Conservation Assessment of the 1985 Food Security Act

Prepared for SWCS by
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PREFACE

Many people term the Conservation Title (Title XII) of the Food Security Act of 1985 the most significant land and water conservation legislation of the past half century. The provisions of that title--conservation reserve, sodbuster, swampbuster, and conservation compliance--along with the conservation easements provision elsewhere in the act, represent a unique, if not revolutionary, attempt by policymakers in the United States to link the stewardship of land and water resources with farmers' and ranchers' eligibility for federal farm program benefits.

President Ronald Reagan signed the Food Security Act, which is commonly referred to as the 1985 farm bill (P.L. 99-198), on December 23 of that year. Since then, six sign-ups for the conservation reserve have been held, and the nation is well over half way toward the program goal of putting 45 million acres of highly erodible cropland into a more permanent, protective cover of grass, trees, or wildlife habitat over a five-year period. Final administrative rules have been issued by the U.S. Department of Agriculture on the sodbuster, swampbuster, and conservation compliance provisions, and efforts are proceeding nationwide to make the various highly erodible land and wetland determinations and to develop the conservation plans needed to implement these provisions. Pending yet are final administrative rules on the conservation easements provision.

Given this flurry of activity since the legislation's enactment and the clear indication that most of the nation's farmers and ranchers will be subject to the requirements of some or all of the provisions in the Conservation Title, the Soil and Water Conservation Society in late 1986 asked USDA for its support of a national conference to assess how implementation of the provisions was progressing. USDA subsequently granted that support, financial and otherwise. Generous financial support for the conference was also provided by the Joyce Foundation of Chicago, Illinois, which has done much over the past decade to promote soil and water conservation in this nation.

This white paper is based on that conference, "American Agriculture at the Crossroads, A Conservation Assessment of the 1985 Food Security Act," held November 1-3, 1987, in Kansas City, Missouri. Its purpose is to summarize and interpret the facts presented and opinions expressed during the conference. Of particular value should be the feedback captured from the regional discussion group sessions that were an important part of the conference program.

There is no attempt in this white paper to prescribe solutions to the issues or problems identified. To reach consensus among the broad cross-section of interests represented at the conference would have been impossible. Instead, the conference served as a forum, and a useful one at that, to test the winds of change and establish channels of communication among the many interests with a stake in what the Food Security Act strives to accomplish. Hopefully, this white paper will further these same objectives.

Max Schnepf, Editor of Publications
Soil and Water Conservation Society

Chapter 1

Introduction

We knew things would change when the conservation provisions of the 1985 farm bill became law. But nobody knew how much.

Peter C. Myers, Deputy Secretary
U.S. Department of Agriculture

Title XII of the Food Security Act of 1985--Public Law 99-198--is entitled simply "Conservation," but the provisions it contains and the sweeping changes it appears to have set in motion have, in many respects, redefined the term "conservation" as previously used in American agriculture.

The most central change, in principle at least, is that conservation no longer implies farmer activities or government programs that exist, separately and unequally, outside the mainstream of the agricultural economy and farm policymaking. Deputy Secretary of Agriculture Peter C. Myers has observed that the 1985 farm bill has "woven...conservation efforts into the very fabric of our farm policy."

Redefinitions of most aspects of conservation flow from this central change. Title XII makes conservation practices on millions of acres of land an eligibility requirement for many U.S. Department of Agriculture (USDA) programs, including most commodity and credit programs. Because the majority of farmers feel that current economic circumstances leave them little choice but to participate in one or more of these programs (and participation rates are, in fact, quite high), conservation no longer merely implies farmers availing themselves, on a voluntary basis, of the technical and financial assistance available through traditional USDA conservation programs. Conservation will become an economic imperative for many farmers in the near term. Given the financial influence of USDA farm programs in the recent past and for the foreseeable future--program payments in 1987-88, for instance, accounted for 40 percent of net income for all of agriculture--conservation activities suddenly rank among the most important business decisions farmers will make, individually and collectively, over the next few years.

As a result, local personnel of the Soil Conservation Service (SCS) and the Agricultural Stabilization and Conservation Service (ASCS), and to some extent conservation district officials and staff, have taken on a distinctly new role since passage of the Food Security Act: They are implementing and enforcing programs and policies that potentially have direct economic effects on hundreds of thousands of farmers and hundreds of millions of acres of land. Some farmers and conservationists welcome this change; others are decidedly uncomfortable with its quasi-regulatory nature.

Conservation planning and education activities, the stock in trade of soil conservation before 1985, are in many respects more important than ever, but they also have changed. They have had to. Title XII has caused planning and education to be mounted on an unprecedented scale. The most salient example: USDA estimates that some 800,000 new soil conservation plans will have to be prepared by 1990.

Planning and education are focused on acute conservation problems (highly erodible land and wetlands) that were often by-passed in traditional conservation programs. Farmers who have never set foot in an SCS office are doing so now, and some are not happy to be there. Deadlines set in the Food Security Act have given conservation planning an urgency it has never had before. The deadlines have also forced innovation and streamlining in planning techniques and procedures. Field determinations of erosion rates, wetlands

characteristics, or the adequacy of erosion control now have economic as well as conservation significance; for many farmers, eligibility for tens of thousands of dollars worth of farm program benefits may hang in the balance. The crush of the Food Security Act workload has profoundly affected day-to-day activities of local USDA and conservation district personnel. And in a great many conservation districts, priorities established by district boards have been swept aside by the overwhelming demands of Title XII.

In November 1987, more than 500 individuals from virtually every part of the country, representing all levels of government, a broad cross-section of the farm community, the environmental movement, the news media, academia, and agribusiness gathered in Kansas City to assess the new meanings of agricultural resource conservation that were introduced by the Food Security Act. Among the objectives of the two-day conference, according to co-chairman Marlin L. Edwards of Pioneer Hi-Bred International, was to promote:

- "a greater appreciation for the need to cooperate between agencies, but more importantly that the public and private sectors find ways to work together effectively and efficiently in implementation of the farm bill conservation provisions;
 - a greater appreciation of the educational support needed to assist farmers....
 - a greater awareness on the part of farmers and agribusiness of the amount of effort which will be required...."
- Edwards also hoped the conference would:
- "[expose] the sensitivities in this farm bill mandate...[and] cause us to carefully implement the provisions with the best information....
 - [provide] ideas which can be used to assist us in the large task we face. To some it may be a computer program, to others an idea of how the public agencies may involve the private sector...to assist farmers in the adoption of conservation farming systems;
 - [make participants] more informed about the conservation provisions... and [provide] an agenda of activities and contributions we can make to agriculture in the years ahead."

This white paper attempts to capture for those who attended the conference, as well as for those unable to attend, the range of information and opinions that emerged from more than 40 presentations at the conference on virtually every aspect of Title XII and its implementation. It also summarizes the reports from seven discussion groups that assessed the Conservation Title from a regional perspective.

This document is not a conference proceedings. Limitations of time and space did not permit direct quotation of each of the conference speakers, or all of the individuals who subsequently sent comments on the conference to the Soil and Water Conservation Society. Every attempt was made during drafting and review, however, to make sure the salient points raised during the conference are presented herein.

It is important to note that the conference was not designed to forge consensus on specific issues or recommendations. Accordingly, this document presents but does not prescribe particular viewpoints or specific policy or administrative reforms.

The Scope of Title XII

A brief look at the scope of the Conservation Title and the impressive statistics it conjures up may suggest why Title XII has been so routinely termed "historic" or "revolutionary," literally from the moment it was signed into law.

The first of the Title XII provisions to be implemented, the Conservation Reserve Program (CRP), had the distinction of becoming one of the country's major natural resource conservation programs within 18 months of its inception.

By the end of 1987, nearly 23 million acres of highly erodible cropland--the type of land that often has eluded traditional government conservation programs --was slated for protection by plantings of grass or trees for 10 years under CRP contracts. Farmers have enrolled this land voluntarily; in return, they will receive payments from the federal government totalling more than \$13 billion over the life of existing CRP contracts. In effect, the CRP has sharply increased--in fact, it has more than quadrupled--the nation's federal soil conservation budget to well over \$2 billion each year for the next decade. At the current enrollment level, the program is expected to reduce soil loss from erosion by some 460 million tons a year (about 20 tons per acre annually).

Conservation efforts potentially as important as the CRP are underway as a result of Title XII's "sodbuster" and "swampbuster" policies, which were designed, according to implementing regulations issued by USDA, "to remove the incentive that certain benefits provided by the Department could give producers to cultivate highly erodible land or to convert wetlands for the purposes of producing an agricultural commodity."

Sodbuster denies farmers eligibility for most USDA programs, including the widely subscribed commodity programs, if they cultivate highly erodible land without following a locally approved soil conservation plan. Under regulations issued by USDA, the policy applies to two extraordinarily large categories of land. Highly erodible land that was not cultivated between 1980 and 1985 became subject to sodbuster immediately after USDA formally proposed the interim rule on June 24, 1986; some 227.3 million acres of such land were identified by USDA.

Under the "conservation compliance" provision of sodbuster, all highly erodible cropland, regardless of cropping history, becomes subject to sodbuster sanctions beginning in 1990, at which time farmers must begin following approved conservation plans that must be fully implemented by 1990. This category of land, according to USDA, comprises 117.9 million acres of highly erodible land. Because the policy applies when at least one-third of a field is highly erodible, another 47 million acres of nonerodible land are encompassed by conservation compliance.

According to USDA, the total of 346.2 million acres of highly erodible land subject to sodbuster "amounts to 24.5 percent of all agricultural land and accounts for 58 percent of all cropland erosion."

Similarly, under "swampbuster" farmers can lose eligibility for most federal assistance programs administered by USDA if they convert wetlands through drainage or other means for the purpose of producing an agricultural commodity. Technically, swampbuster applies to all remaining wetlands in the United States (except certain wetlands in Alaska exempted by Congress in 1987), that is, an estimated 90.9 million acres, according to USDA's 1982 National Resources Inventory (NRI). Of these, some 78.4 million acres are on nonfederal land, although, according to the 1982 NRI, only about 5 million acres have significant potential for conversion to agricultural use.

Will Title XII Endure?

Without question, the Kansas City conference revealed a great deal of enthusiasm about the conservation potential of Title XII programs and policies. But that enthusiasm was tempered by more skeptical--some may prefer realistic--appraisals of what the Conservation Title actually will accomplish. For all their apparent precision and scale, USDA's estimates of how much land will be protected, how much soil erosion will be reduced, and so forth, are of course nothing more than numerical prognostications. In the final analysis, these impact estimates will be benchmarks only for measuring the success of Title XII or the degree to which the reach of the law exceeded its grasp. A wide range of opinion was evident in Kansas City regarding the potential impact of Title XII, the prospects for rigorous implementation, and the possibility of future

legislative change to strengthen the Conservation Title--or weaken it.

"We know the skeptics are raising questions like, how soon will these provisions go away? If enough people hold off getting a conservation plan, will Congress extend the deadline? Will the standards change? Will they get more strict, or will they loosen up?" said Deputy Secretary Myers in his statement to the conference. "If you know someone who's holding back getting a conservation plan because of questions like these, tell them they are taking a gamble...a big gamble.... Will the conservation provisions go away? I don't think so. Not if you look at the coalition of farm and environmental groups that got them established. Those groups fought long and hard to bring more consistency to government commodity and conservation programs. They won't give up now because some folks drag their feet."

But Dean Kleckner, president of the American Farm Bureau Federation, told the conference, "Let us remember a truth that is easily forgotten. Actually, it is a rule of politics. One Congress cannot bind another. Maybe this reminder seems pointless here and now, but I think not. When it comes to farm programs, one Congress hardly gets done writing what the next one wants to re-write, or to completely erase." Citing a Farm Bureau policy, Kleckner said, "In the event that conservation compliance provisions are not modified to reduce the economic hardships on producers, we urge legislative repeal."

Other speakers commented on the pitfalls of tying conservation requirements to farm programs and economic circumstances that can change dramatically in the space of a few years. "Conservation policy historically accommodates production policy in the United States," Marty Strange, co-director of the Center for Rural Affairs in Walthill, Nebraska, told the conference. Strange added, "When production is surplus and prices low, conservation is convenient; when export sales are brisk and prices robust, the commitment to conservation withers. Nothing in the current set of policies suggests anything substantively different. The effectiveness of the Conservation Reserve Program, for example, depends not only upon short range changes in demand for farm products, but in a long-range commitment to enforce conservation compliance, sodbuster, and swampbuster after the 10-year CRP contracts expire."

Bill Laycock, head of the Department of Range Management at the University of Wyoming, sounded a similar theme: "Will the current conservation reserve succeed where the soil bank failed and result in permanent retirement of these erodible lands? The sodbuster and compliance provisions of the 1985 farm bill should help accomplish this. The main question is whether USDA policy and congressional legislation will remain resolute in preventing re-plowing of these lands when CRP ends. History does not provide much encouragement that such resolve will prevail. We seem to be very willing to modify our conservation laws and policies to take advantage of short-term economic opportunities."

Clarence Durban, president of the National Association of Conservation Districts, expressing a view voiced by many conference participants, said it was imperative to motivate the landowner: "For the first time in our federal conservation programs, we have provided a strong incentive for landowners to develop a dedicated land stewardship ethic. But the agriculture community is, in many cases, adopting a wait-and-see attitude. There is still a lot of skepticism among farmers as to whether these programs will--or even should--work. While the commitment and initiative of the American farmer cannot be doubted, we have to keep in mind that all this is coming at a time when the agriculture community is under a great deal of economic stress. Given the hard times farmers are experiencing, it is no wonder that they would greet these new programs with some skepticism. After all, the farm bill could have a considerable impact on their financial situation.... A point that some outside our conservation network may not understand is this: if farmers don't accept and support the conservation provisions of the farm bill, success will surely elude us all."

In summing up the proceedings, conference co-chairman and Assistant Secretary of Agriculture George Dunlop said, "We should not underestimate the enormity or complexity of the tasks [ahead]... The Department of Agriculture in all of its history has never been asked by Congress or by the public to undertake such a broad, comprehensive, consistent, and coordinated program that involved all of its agencies into one problem-solving enterprise."

Secretary Dunlop stressed the need for continued cooperation among government personnel, farmers, and the conservation community and consistency in the administration of the Title XII provisions. In his view, "If I had to sum it up...what we're doing is working. The new laws are being successfully implemented. Our most fundamental expectations are being met. And indeed, while there are many complexities, challenges, and problems which remain unresolved, they're being addressed."

"This conference has been successful in pointing out in very specific detail that we can and will have the kind of implementation of the Food Security Act that will be a model for government and the private sector working together in a way they never have," Secretary Dunlop concluded. "I believe that this conference will demonstrate that we can improve the ability of agricultural groups and farmers to work together with conservation and environmental organizations...and that this conference will provide a foundation for even more initiatives and cooperation as we move into the 1990s and the 21st century...."

Chapter 2

Conservation Reserve Program

With its goal of converting 40 to 45 million highly erodible acres to permanent cover under 10-year contracts, the CRP is without doubt the most ambitious long term land retirement program ever enacted.

Milton Hertz, Administrator
Agricultural Stabilization and Conservation Service

The CRP was the first of the major provisions of Title XII to be implemented on a large scale. After five sign-ups by farmers, CRP land could be found in virtually every part of the country, though much of the 23 million acres enrolled by the end of 1987 were in the Great Plains and Midwest regions. By virtue of its scale and attendant visibility among conservationists, farmers, and agricultural policymakers, the success of the CRP in meeting a number of objectives will be an important litmus of the overall success of Title XII. In general, the CRP was favorably reviewed at the Kansas City conference. A recent survey by the American Farmland Trust (AFT) corroborated this finding among participating farmers, more than 95 percent of whom expressed satisfaction with the program. "It's enjoyable to come and talk about a successful farm program," said AFT's president, Ralph Grossi. "As a dairy farmer myself, I'm very well aware of the other kinds of farm programs."

In both plenary and regional sessions, however, a number of significant criticisms were raised about the program's performance to date, and numerous recommendations--some modest, some sweeping--were offered to improve the CRP's future expansion and operation. ASCS Administrator Milton Hertz acknowledged, "Yes, we are pleased with the overall progress of the program. But that does not mean there are no problem areas requiring attention, and that there are no questions about our continued progress as we look ahead to 1990."

The CRP is designed to encourage farmers to take highly erodible land out of crop production and plant it to grass or trees by entering into 10-year contracts with USDA. Enacting the program, Congress clearly sought two broad types of benefits: environmental, through reduction of soil erosion and enhancement of wildlife, and economic, through financial assistance to farmers and reduction of crop production (with possible attendant benefits of reduced commodity program outlays).

Farmers submit bids to the local ASCS office for the amount of rental payment they will accept (per acre annually) to convert such cropland to protective vegetation for the entire 10-year period. In return, farmers plant grass, trees, or other vegetation according to a conservation plan developed and approved by the local conservation district. USDA pays up to 50 percent of the cost of establishing the protective vegetation, which may include grasses and legumes, forest tree plantations, permanent wildlife habitat, field windbreaks and shallow water areas for wildlife, or any combination of these practices. Eligibility for the program is limited to fields having two-thirds or more highly erodible cropland.

Off to a Fast Start

"The ink was barely dry on the 1985 act when ASCS announced the first sign-up for the new reserve," Hertz told the Kansas City conference. "We were charged with implementing the program in 60 days, so we had to work fast and keep things as simple as possible. The results of that first sign-up, in March

1986, were admittedly disappointing. Of 4.8 million acres bid, only about 840,000 were accepted. But since that shaky start, farmers have become more informed about CRP and its benefits...."

Administrator Hertz concluded, "Believe me, none of us expected we'd be this far along in only a year and a half, having signed up nearly 23 million acres--more than half the five-year goal. And this has been achieved at a reasonable cost to the government. To date, the average annual rental cost is \$48.40 per acre, which amounts to a total annual cost of about \$1.1 billion in rental payments for acreage enrolled so far."

At the time of the conference, USDA had initiated an interagency analysis of the CRP, including the program's cost-effectiveness (results should be available sometime in 1988). Ralph Grossi presented the results of an analysis conducted for AFT by Economic Perspectives, Inc. "The study showed that the conservation reserve reduces deficiency payments by more than the rental rate and the costs of establishing cover," Grossi stated. The CRP appears to be more cost-effective in reducing production than a paid diversion and reduces government commodity loan and storage costs. The analysis projected that a fully subscribed CRP would raise commodity prices and reduce federal outlays by \$600 million over the period 1986 to 1990. At the same time, the AFT study projects that the CRP will increase farm income \$2.3 billion over that interval.

According to USDA estimates, average soil erosion rates on land enrolled in the CRP by the end of 1987 were reduced from about 22 tons per acre per year (a rate more than four times greater than the national cropland average) to less than 2 tons per acre per year. At the current enrollment level, the CRP will reduce cropland erosion by an estimated 460 million tons a year for 10 years. This represents a substantial improvement in the erosion reduction achieved through traditional USDA conservation programs, particularly in terms of the acreage of highly erodible land treated, and represents an appreciable reduction in overall cropland erosion.

What contributed to the fast start for the CRP in its first 18 months? Greg Larson, with the Minnesota Board of Water and Soil Resources, presented results of an informal, 10-state survey of conservation officials in which he identified four strategies that boosted enrollment:

- "Coordination of information and promotion campaigns between agencies.
- "Non-USDA agencies (for example, conservation districts and state forestry and wildlife agencies) assisting with sign-ups.
- "The use of state, local, and private (for example, wildlife group) funds to supplement annual rental payments or vegetative cover establishment.
- "Establishment of a multiagency CRP review and 'troubleshooting' group."

Larson noted that the officials he contacted pointed out a number of "positive aspects of CRP" that contributed to the program's success to date:

- "Changed landowner attitudes--marginal cropland is now viewed as a resource to retire rather than farm.
- "Provides farmers with a stable income which, in turn, helps local and state economies.
- "Enhances land-based recreational opportunities in the rural sector.
- "Erosion control, water quality, and wildlife benefits.
- "Provides an opportunity for coalition building.
- "Allows resource agencies to be proactive rather than reactive.
- "Helps stabilize declining land values."

Roger Holck, president of the Kellogg-Sully Bank & Trust in Kellogg, Iowa, described the financial appeal of the CRP for some farmers through the example of a transaction conducted by one of his customers. "The farm was purchased for \$500 per acre with a 10 percent down payment and the balance carried on contract with the seller at 8 percent interest with a full 10-year amortization.... The grand total of landownership costs is \$76,800. The 10-year total of CRP rent payments is \$76,500. In other words, CRP will totally pay for the farm in 10 years."

While the economics of the CRP have boosted interest in many areas, worries about the social and economic impacts of the program were expressed at a number of sessions, most directly and thoroughly by Marty Strange, co-director of the Center for Rural Affairs in Walthill, Nebraska. "Early indications are not favorable for those of us who believe that small- and moderate-sized, owner-operated, diversified family farms are the soundest social foundation for American agriculture." Strange listed among the "unfortunate social consequences of current conservation provisions of the 1985 Food Security Act...":

- "Tenants are muscled out of land that goes into the CRP. Despite stated intentions to protect tenants from abuse, as a practical matter...nothing USDA is willing to try has worked. Landlords have effective ways to rid themselves of tenants on land they want to put into the reserve, and to do so without offering a fair or reasonable share of the CRP payments.

- "The CRP contributes in some instances to land speculation. Where CRP payments are high relative to market rental values, they may actually put a floor under land values, stabilizing some financially weak farming operations. But this is generally only possible because the program has created conditions ideal for absentee investors who may find the CRP a good hedge against inflation or a better investment than the stock market.... The outrageously high CRP bid values on irrigated lands in some parts of Nebraska, for example, where the annual CRP payment was roughly equal to the market value of the land at the time of the bid, have produced a perverse land boom by outside investors.

- "Bid pools are so insensitive to variations within and between pools in land rental value, soil productivity, and erodibility that the CRP has a sharply differential impact on local economies with similar problems. This only pushes other land out of the reach of farmers who must pay for it from farm income."

Water Quality Concerns

Despite the impressive reductions in soil erosion reported for the CRP, it is widely recognized that soil erosion rates are far from perfect indicators of actual erosion damage. Of principal concern is the inadequacy of erosion rates--as well as the current erosion criteria for the CRP--as indicators of off-site erosion damage, particularly sediment and runoff damage that affects water bodies.

For this reason, many conference sessions brought up suggestions for refining the CRP to better focus it on surface water quality problems. Title XII authorizes the secretary of agriculture to use the CRP to deal with such problems. In January 1988, USDA announced guidelines under which limited areas of land that are not considered highly erodible under the regulatory definition, but which are in proximity to water bodies, can be enrolled in the CRP and planted to protective vegetation that allows the land to serve as filter strips. ASCS Administrator Hertz noted, "We are taking a harder look at increased targeting of the program to address water quality concerns in areas where it is practical and cost-effective to do so. Making filter strips eligible for enrollment is but one available option."

A related concern is the geographic distribution of the 23 million acres currently enrolled in the CRP. A very large share of the CRP land has qualified as a result of wind erosion. While serious, the problems are thought to be less costly to society than the damage to soil productivity and water bodies that is associated with sheet, rill, and various types of gully erosion and runoff.

Several plenary speakers and regional discussion groups noted that CRP enrollment has lagged in the Corn Belt and certain eastern states; low enrollment in the vicinity of the Chesapeake Bay has been especially disappointing to conservationists who view the CRP as a potential tool for dealing with water quality problems there. The main reason for low enrollment

relative to eligible land in these regions appears to be the CRP bid caps or "maximums." These are deemed too low by most observers, given the productivity of the land; prevailing cropland rental rates; or, in the case of the Chesapeake region, the elevated price of farmland because of nonfarm (mainly recreational) demand for waterfront property. Furthermore, average yields on land enrolled in the CRP have risen over the course of the five sign-ups, implying that higher bids or other incentives may be needed in the future to entice highly erodible land into the program.

Not Enough Trees?

Hertz hit a commonly expressed concern in stating: "We clearly are disappointed in the record so far on tree plantings. The law specifies a goal of 12.5 percent of the CRP land in trees, and less than 6 percent of the acreage has been enrolled in tree plantings in all but one sign-up. In the fifth sign-up, we placed added emphasis on encouraging tree plantings where suitable, and we will continue to do so in the future. Tree stands dramatically reduce soil erosion, benefit water quality and wildlife, and provide future sources of timber," Hertz said. "And once cropland is planted to trees, it is likely to remain out of production for long periods."

In January 1988, USDA announced the criteria for highly erodible land would be relaxed from 3T to 2T for tree plantings, following the recommendation of representatives from ASCS, SCS, the Forest Service, and Extension Service. Notwithstanding the benefits of tree plantings and the farm bill's goals in that regard, some at the conference expressed concern about the prospective rule change, noting that the CRP was intended to be focused on acute soil erosion problems, not the planting of trees per se.

Toward the 45-Million-Acre Goal: What Lies Ahead?

"A logical question is whether we think [the] CRP will achieve its 40 to 45-million-acre goal and meet the objectives envisioned for the program," Hertz said. "Our progress to date has exceeded expectations, but several factors will influence CRP participation down the road."

Hertz noted the following considerations:

- Conservation compliance: "As producers become more aware of the impact of this provision on their individual operations--especially as the 1990 start-up deadline for conservation plans approaches--we expect it will provide a strong stimulus for many to enter.... For many producers, [the] CRP will offer payments to do what they ultimately may be required to do to be in conservation compliance."

Several conference speakers noted a potential problem in the interaction of the two provisions. If the CRP is not a viable option for producers, either because rental rates are unattractive, planning is put off to the last minute, or the 25 percent county cropland limit on CRP enrollment has been reached, pressure may build to expand the CRP or delay or weaken conservation compliance.

- The 25 percent limit: "So far 69 counties, mostly in the Plains and Mountain States, have exceeded the 25 percent limit," Hertz said. Under the Food Security Act, no more than 25 percent of the cropland in any county can be enrolled in the CRP unless a waiver is granted. The measure is designed to mitigate severe economic impact on communities and agribusiness as a result of large scale land idling--a major problem in the Soil Bank program of the 1950s and 1960s. "As time goes on," Hertz said, "more and more counties...are going to find themselves hitting the acreage limitation. This was a major reason that the dual erodibility criteria were extended beyond the 1987 program year. An expansion of the acreage eligible for CRP was necessary to meet the program's 40-million-acre goal."

Bank President Holck noted that economic impacts of the CRP remain an important and sensitive issue. "One local cooperative estimates that 5,000 acres within their trade territory have been enrolled in CRP," he said. "They expect to lose crop input sales on two-thirds of the CRP acres. Translated to dollars, this means a loss in revenue of approximately \$350,000. The other side of this two-edged sword comes in the fall when there are 300,000 less bushels of grain to dry, store, and market, hopefully with a profitable margin. This loss of business very well could result in the loss of employment of one or more people."

- The financial attractiveness of the CRP: Hertz observed that a recent ASCS analysis showed that CRP enrollment rates were related to rates of return on land received by producers through the program. A large portion (58 percent) of the land enrolled enjoys a rate of return greater than 10 percent, whereas enrollment is very low in areas where the rate of return is less than 5 percent. "The analysis suggests we could have trouble reaching the 40-million acre goal," Hertz stated. "We are running short of eligible land where [the] CRP offers high rates of return."

Greg Larson's 10-state survey of conservation officials uncovered other problems that may well affect future CRP performance and enrollment.

- "Bid level and pool area structure is sometimes hindering enrollment.
- "Competition exists between the feed grain program and CRP.
- "Farmers with meadow/hay based rotations are often ineligible.
- "[CRP] bid levels are setting a cash rental 'floor,' thus increasing costs for non-participants.

- "Inconsistency between CRP land eligibility and highly erodible land criteria has, in some states, created a loophole whereby land is eligible for CRP but is not highly erodible land [under conservation compliance and sodbuster]. Consequently, farmers enroll large acreages in CRP then clear additional land to farm without sodbuster penalties.

- "Uncertainty that USDA will 'hold the line' on CRP requirements."

On this last point, Larson offered a recommendation that summed up concerns expressed at many points during the conference. "USDA should issue clear, consistent, and timely messages that CRP (and other Food Security Act) requirements as established in final rules will not be relaxed," he said. "This will be particularly important if commodity prices increase significantly before the expiration of CRP contracts."

Larson also noted a need for state and local programs and for expanded staffing to complement the federal CRP: "State and local governments can do much to complement the Conservation Reserve Program. One such example exists in Minnesota. A state-funded conservation reserve program called RIM (Reinvest in Minnesota) complements CRP by offering landowners lump sum payments for 20-year or perpetual conservation easements.... Although Minnesota has over 1.6 million acres in CRP and a greater percentage of eligible cropland (65 percent) in CRP than any other state, landowners still enrolled over 20,000 acres of marginal cropland in the 1986-1987 RIM program."

Several speakers alluded to proposals, such as legislation introduced in 1987 by Senator Sam Nunn and others, for expanding the CRP beyond the 40 to 45-million-acre statutory goal. The APT analysis discussed earlier examined a CRP expansion to 60 million acres and projected further government cost reductions (\$1.2 billion annually) vis a vis the annual commodity programs. APT's Grossi noted, as did many other conference participants, that the Food Security Act provides for a change in the funding mechanism for the CRP in the 1988 fiscal year, from Commodity Credit Corporation reimbursement to annual appropriation. This change may introduce uncertainty about funding for future enrollments, whether the acreage goal is expanded or not. Many conference participants noted that this type of uncertainty might compromise farmer confidence in the CRP and other conservation provisions.

Considerable concern also was expressed about the fate of CRP acres following expiration of the 10-year contracts.

Chapter 3

Sodbuster and Conservation Compliance

In putting together the 1985 farm bill, this country made a choice. It was a choice between consistency and inconsistency in commodity and conservation programs. We chose consistency. It was the right choice.

Wilson Scaling, Chief
Soil Conservation Service

The sodbuster policy originated in concerns by farmers and ranchers in Weld County, Colorado, over the conversion of fragile rangeland to cropland use, particularly by farm owners and operators who lived outside the county and who were able to subsidize this improper land use with the benefits of USDA commodity programs. First proposed by Senator William Armstrong of Colorado, sodbuster sought to deny a broad range of USDA program benefits to farmers who improperly cultivate highly erodible land, exacerbating both soil erosion and commodity supply problems. The proposal was debated for years in the U.S. Senate and became progressively stronger as it neared final passage in Title XII of the Food Security Act.

"Conservation compliance," first proposed by the conservation coalition (a group of national conservation and environmental organizations) in early 1985, is technically a subprovision of sodbuster, but in scope and potential impact it is far more significant. Sodbuster, which came into effect in mid-1986, applies to highly erodible land, except land that was ~~not~~ cultivated during the "grandfather" period--crop years between 1980 and 1985. Under conservation compliance, that "grandfather" dies at the end of 1989. Thereafter, sodbuster applies to any highly erodible land, regardless of its cropping history. Producers must have a plan in place for such land by the end of 1989; they have a "grace period" from the beginning of 1990 to the end of 1994, during which they must implement their locally approved conservation plan according to the plan's schedule in order to remain eligible for most USDA programs.

As mentioned in the introduction to this paper, under USDA regulations sodbuster applies to an estimated 227 million acres of highly erodible land. In any one year, only a few million such acres are expected to be brought into commodity production, particularly when commodity prices are weak. Still, the conversions must comply with a locally approved conservation plan if the producer wishes to remain eligible that year for commodity, Farmers Home Administration (FmHA), and other USDA programs.

Conservation compliance applies, under USDA rules, to an estimated 118 million acres of highly erodible cropland that were cultivated at least once during the 1980 to 1985 crop years. (Another 47 million acres, largely not highly erodible, are also encompassed by the provision because it applies to any field that is at least one-third highly erodible land.)

Sodbuster, conservation compliance, and the Conservation Reserve Program were designed by Congress to complement one another. The chief interaction, of course, is between the CRP and conservation compliance. Under existing rules, they apply to similar though not identical land. Incongruities between definitions of land eligible for the CRP and subject to compliance was, in fact, a recurring theme and concern expressed during the Kansas City conference. The CRP is considered a transition program, a means to encourage farmers to convert highly erodible land unsuitable for cropping to more sustainable uses. Conservation compliance is intended to phase out the improper use of such land by requiring conservation in return for program eligibility. As the preceding chapter discussed, both the Congress and USDA envision the CRP

as a workable option for responding to conservation compliance, in particular for farmers whose cropland erosion problems are severe and costly to remedy under a regime of program crops. Whether the two provisions will mesh as intended in application was a major issue during the conference, for reasons discussed earlier.

Wilson Scaling, chief of SCS and conference keynote speaker on sodbuster and conservation compliance, characterized the policies in terms of the choices they present. "Perhaps most important," he said, "are choices for the producer:

- "Making an effort to understand the provisions, or ignoring the whole issue--that's a producer's choice.
- "Participation or nonparticipation in USDA programs is the producer's choice.
- "There's the choice of applying for a plan...or waiting until it's too late to meet the December 31 deadline in 1989.
- "A choice of conservation systems."

Considerable Heartburn: How Much Erosion Reduction?

The central regulatory question that remained undecided at the time of the Kansas City conference has since been officially resolved: the question of how to determine the amount of erosion reduction a farmer will have to achieve in order to comply with sodbuster and conservation compliance. This decision has profound implications for the performance of these policies, field procedures, and the perception of the policies by farmers.

Under its initial interim rule, USDA required erosion reduction to T-value levels, with a waiver to 2T in circumstances where the cost of attaining a greater erosion reduction was impractical or would impose an economic hardship on the producer. Subsequently, USDA proposed an interim rule that eliminated reference to T in implementing sodbuster and conservation compliance, substituting "alternative conservation systems" approved in the local field office technical guide.

"We're still working under an interim rule concerning the criteria for level of erosion reduction," Chief Scaling told the conference. "We've had to debate whether or not alternative conservation systems allowed in SCS field office technical guides should be permissible criteria for conservation plans on existing cropland and on sodbusted land. We experienced considerable heartburn over the issue of allowing 'alternative' conservation systems in field office technical guides," he added. "This issue received considerable public comment.

"We had two choices:

- "Use a rigid national standard and in doing so stretch our erosion formulas to, and perhaps beyond, the scientifically defensible limits.
- "The second choice was to use a more flexible approach based on alternative conservation systems.

"We chose to allow the alternative systems."

Chief Scaling specified a number of tenets in the department's "basic philosophy" regarding the rule change:

- "We want to develop conservation systems that are economically and technically feasible and socially acceptable.
- "We want to achieve significant reduction in erosion without imposing unreasonable economic costs on producers or on the taxpayers.
- "But I want to make it very clear that we do not intend to compromise our technical standards. The conservation systems included in the SCS technical guides will consist of high-quality practices.
- "What we do intend is to trust the seasoned judgment of SCS state conservationists and their experienced field people, with input from local conservation districts and others."

Myrl Mitchell, president of the Plains Cotton Growers in Lubbock, Texas,

agreed wholeheartedly with USDA's decision. Describing a Texas A&M University analysis of conservation compliance, Mitchell said that "the study concluded that the imposition of stringent conservation regulations, such as those based on rigid T values as first proposed, could sound the death knell for agricultural production in 11 of our southern counties, reduce production from between one-third to two-thirds in another seven, and result in forced changes in cropping patterns that would cause significant economic losses in the other seven counties. Further, according to A&M, the effect on gins, oil mills, warehouses, banks, implement dealers, chemical and other suppliers of the agricultural industry would be devastating."

Mitchell, in describing farmers' initial reaction to the proposed regulations, remarked, "We were scared!" He said that producers were, in his opinion, willing to practice land stewardship in return for farm program benefits "...if we are allowed to do so on an economically sound basis. Some of our producers may still need convincing, but with the penalty for failure to adopt conservation plans being what it is, you can be sure that won't take long.... Happily, we aren't as scared now as we were in the beginning. We're finding that most in the Soil Conservation Service are willing to listen to our side of the story."

The issue was frequently discussed during the conference, and opinions differed sharply. The most direct consideration of the matter arose in a session devoted to the criteria used to define highly erodible land.

"The crux of the issue is this," Charles Benbrook, executive director of the National Research Council's Board on Agriculture remarked. "Will conservation compliance work and remain politically viable if it is implemented at the local level by 10,000 or so individuals, following a set of imprecise, nonquantitative guidelines on how local SCS personnel should interpret what is 'reasonable' to expect from farmers based on the content of technical guides?"

"Technical guides vary greatly by age and specificity. Many do not include much data on certain practices. They often lack essential USLE [universal soil loss equation] information. The discussion and data on the costs of adopting practices is often outdated and rarely complete...."

Benbrook continued: "Even with the nation's very best technical guides, it will always be difficult to go from conservation practice/soil type information in the technical guides to judgements as to the 'reasonableness' of the costs associated with a particular conservation system on a particular farm. Farmers are likely to have opinions about this, and are likely to express them vigorously. Above all, farmers (and regional or crop-specific commodity organizations) do not like being treated unfairly."

Bob Warrick, a Nebraska farmer and a leader in the Sierra Club's efforts to enact Title XII, strongly opposed USDA's decision, seeing it as "a total cop-out on the whole compliance section.... I am hoping that the T [value standard] will be maintained, mainly because I feel that SCS offices do not have the political muscle to resist the pressure farmers will place on them when being asked to relax the T standard and be allowed to go to as much as 5 T. Allowing 5 T is not conservation; on the contrary, it's blackmail, and is a drastic weakening of the whole conservation section."

Mack Gray, with SCS in Washington, D.C., defended USDA's choice of technical guides. "I believe there are technical problems associated with trying to administer a T-based standard. Don't get me wrong, I will not stand up here and talk down the universal soil loss equation and the wind erosion equation. They're darn good tools. I don't know where we'd be today if we didn't have them...[but] there is no way that you or I, or anybody else could take a group of people out and measure the wind erosion or water erosion that's occurring [at a particular site] and tell anybody that we were very precise. If we measure 10 tons per acre, it may be anywhere from 5 to 15 tons, and it may be anywhere from 3 to 18 tons, we don't know. Do we, therefore, set a standard of 5 or 10 tons, and if you set a standard, are you going to cut off [benefits]"

on that standard? If you set a standard of 5 tons and a producer gets to 6 tons, are you going to tell him he can't participate in a program...?"

Gray added: "I think everybody ought to share [a] concern that this act be administered in such a way that it accomplishes something. I think the intent of Congress was to achieve a significant erosion reduction. I just happen to believe that if we set up a process for local input into a set of alternatives that farmers can carry out, our technical people, working with farmers, local soil and water conservation district supervisors, ASCS committees, commodity groups, environmental groups, and private citizens, can come to a consensus about what's reasonable to expect [of farmers] that can go into the technical guide. Then the producer can choose.... But if they don't feel like it's being implemented in such a way that is fair, in such a way that it does not destroy their ability to make a living, there are not enough people in SCS, ASCS, FmHA, EPA [Environmental Protection Agency], or anywhere else to police it."

Myrl Mitchell colorfully summed up the views of cotton producers in this manner. "Somewhere I heard a story about the difference between a contribution and a commitment. Sorry I don't remember the details, but it was something about the hen and the pig that supply us our bacon and eggs at breakfast. The eggs from the hen are a reasonable contribution; the bacon from the pig is total commitment.... We as farmers are willing to make a contribution to conservation, but it is unreasonable to expect that we will willingly commit ourselves to oblivion."

In the final rule, USDA proposed different erosion reduction rules for sodbuster and conservation compliance. For sodbuster infractions affecting native vegetation, either grass or trees, a T value standard is required of conservation plans. For conservation compliance, USDA retained the essence of the interim rule--use of alternative conservation systems as set forth in field office technical guides.

The Workload: Some Initial Shock

Deputy Secretary Peter Myers' statement to the conference contained a rather stunning statistic about workload related to conservation compliance: "We estimate most farmers producing on highly erodible land will want to develop conservation plans so they can remain eligible for USDA program benefits. That must be done by the end of 1989, and the plan [must be] fully implemented by the end of 1994. We estimate that 800,000 conservation plans may be developed over the next two years."

Apropos of that daunting assignment, Chief Scaling observed, in what may have been an understatement, "There was some initial shock among our field staff when the first workload estimates were made. But we're coming out of that now. Especially in the states with the heaviest workloads, our choice was clear: redirect our efforts to the farm bill...and get to work!"

Ray Ledgerwood, eastern field representative for the Washington State Conservation Commission, provided a state and local perspective on the workload issue. "Washington State has a tremendous planning workload to address its estimated 4.9 million acres of highly erodible land," Ledgerwood said. "The workload is projected at 450 staff years. By redirecting existing Soil Conservation Service staff, granting overtime, projecting conservation district employees time and available volunteer help, a shortfall of 53 staff years is still expected. These figures are relatively small in comparison to the 18 states with even higher planning workloads." One consequence, he noted, is that other programs are suffering. "Programs in range, forestry, water quality, stream corridor protection, [and] urban related projects are being set back in some areas because of SCS policy to work primarily on these conservation provisions. Many conservation districts are having to reassess their local priorities, not because of changes in their districts' natural resource problems, but because of changes in staffing." Ledgerwood also pointed out,

however, that the workloads were inspiring greater efficiency in field offices and greater interagency cooperation at all levels--a common theme of the conference.

How Soon Will These Provisions Go Away?

Another common theme was the widely reported skepticism among farmers that the "sticks" in the 1985 Food Security Act--sodbuster, conservation compliance, and swampbuster--would remain in law or be rigorously wielded by USDA.

"We know the skeptics are raising questions like, how soon will these provisions go away?" Deputy Secretary Myers said in his statement. "If enough people hold off getting a conservation plan, will Congress extend the deadline? Will the standards change? Will they get more strict? Or will they loosen up?"

Warrick put it this way: "The time is fast approaching whereby plans must be finished...and then in five years conservation practices must be in place. We are having farmers come into SCS offices that have never been into one before. Conversely, a large number of farmers are never going to go into an SCS office because they believe on the last day the rules will change and they will never have to put conservation on their farms, but still [remain eligible] for federal subsidies. I hope they are wrong!"

Ledgerwood noted similar problems in Washington State: "It is safe to say at this point that only the minority of producers have a good working knowledge of these conservation provisions and how they are impacted by this legislation. One indication of how well local producers are informed is the number of sign-ups for conservation plans in the local field office. In Whitman County, 250 producers have signed up for the conservation planning activity. This represents 16 percent of the 1,600 producers who have highly erodible land in the county. Many of the producers have developed a wait-and-see attitude, probably due to the fluctuations, constant changes, and temporary nature of past farm bills."

Chief Scalling stated, "To date, we have completed about 40 percent of the technical determinations of erodibility. Conservation planning has been completed on about 20 percent of the highly erodible land subject to the farm bill.... Our nationwide goal for 1988 is to complete 90 percent of the highly erodible land determinations and 65 percent of the planning."

Chapter 4

Swampbuster

Public concern for environmental values has recently required a re-evaluation of our attitudes toward wetlands--those soggy frontiers between land and water where wildlife find a home and our fisheries are nurtured.

Gary A. Margheim
Soil Conservation Service

Subtitle C in Title XII of the 1985 Food Security Act makes producers ineligible for most USDA programs if they convert wetland areas (after December 23, 1985) for use in the production of agricultural commodities. Commonly known as "swampbuster," this policy is intended to serve much the same purposes for wetland conservation that sodbuster is intended to serve for soil conservation: to prevent federal farm program benefits from subsidizing conversion of a fragile resource to cropland use. Unlike sodbuster, producers cannot avoid swampbuster sanctions by following a locally approved conservation plan. Soil erosion can be kept in reasonable check on many fragile soils if adequate conservation systems are put in place. In the case of wetlands, however, drainage and other alterations required to prepare the land for crop production generally eliminate most or all of the benefits of natural wetlands. Conservation plans simply cannot mitigate the results of wetland alterations.

As Gary Margheim, director of the Land Treatment Program Division of SCS, stated at the Kansas City conference, swampbuster grew out of new public appreciation for wetlands. "Public concern for environmental values has recently required a re-evaluation of our attitudes toward wetlands--those soggy frontiers between land and water where wildlife find a home and our fisheries are nurtured," Margheim said. "The more traditional view of wetlands as latent resources awaiting reclamation to more 'useful' purposes was in direct conflict with this growing concern." So were farm program payments that actually encouraged wetland conversion, particularly during times of large commodity surpluses and record farm subsidies.

"According to the 1982 National Resources Inventory, about 5.2 million of the nation's 76 million acres of wetlands have a medium to high potential for conversion to cropland," Margheim pointed out. "These lands have the highest probability of being affected by swampbuster."

Final rules for implementing swampbuster were published in the *Federal Register* on September 17, 1987, culminating over a year of work by USDA, including analysis of about 8,400 public comments submitted on the interim rule published in June 1986. Of all the Title XII provisions, swampbuster has generated the most controversy to date, especially in North Dakota, where farmers have reacted strongly to both the policy and its implementation in the prairie pothole region.

Some Important Technical Issues

Margheim reported that field experience gained during implementation of the interim rule, including pilot testing of the rule in six states (Illinois, Nebraska, California, Maryland, North Dakota, and Mississippi) revealed "the need for additional training of field personnel in wetland identification." That point was emphasized many times during the conference. David Risley, assistant administrator, and Michael Budzik, district manager, both with the Ohio Department of Natural Resources Division of Wildlife, stated that "wetland

identification will continue to be a problem without an obvious solution. The Soil Conservation Service simply does not have enough personnel to adequately service wetland identification."

USDA's early experience with swampbuster also showed, Margheim observed, that FWS [Fish and Wildlife Service] Wetland Inventory maps and soil surveys "are useful as tools for wetland identification...[and] a significant number of wetland determinations could be made in the [local] office." Margheim also noted that USDA had found "inconsistencies in the interpretation of wetland and converted wetland" among states and even within smaller geographic areas.

Most of the thousands of public comments on the interim rule focused on five or six issues, which Margheim reviewed in his presentation. In light of the special importance these technical matters have attained in the implementation of swampbuster and the controversy surrounding this policy, a summary of Margheim's observations about the final rule follows:

Commenced: This issue--When did the alteration of the wetland begin?--received 883 public comments. Under the final rule, "commencement was based on one or more of the following criteria: (a) the conversion activity actually started before December 23, 1985, or (b) the person expended or committed substantial funds by entering into a contract before December 23, 1985, for the conversion activity or for construction materials and supplies directly related to the conversion." Persons who want a commencement determination made on their farm must request it by September 19, 1988, and "demonstrate that the wetland conversion has been actively pursued and will be completed by January 1, 1995."

Minimal Effect: Some 774 comments were received on this aspect of the interim rule. Under the law and regulations, a farming activity does not trigger swampbuster penalties if it has been determined that the activity will have minimal effect on wetland characteristics or values. "The final rule maintains the SCS environmental evaluation process as the mechanism for determining minimal effect...[and] precludes further alteration of converted wetlands which were subject to a minimal effects determination unless subsequent alterations are also determined to have minimal effect."

Ineligibility: Seven hundred identical comments addressed the swampbuster penalty of ineligibility for most USDA programs. All of the comments proposed that penalties should apply only on the farms on which the violation occurred and not on other land or leaseholdings. But the act and the final rule retain broad application of penalties. Furthermore, "activities of a water resource district, drainage district, or similar entity will be attributed to all persons within the district's jurisdiction," as Margheim noted. "If a person's wetlands are converted due to district actions...the person is considered to have caused or permitted the conversion. Production of an agricultural commodity on this converted wetland would result in loss of certain USDA program benefits."

Converted Wetland: The question of which wetlands are considered "converted" as of December 23, 1985--and therefore are exempted from swampbuster--drew 700 comments. Margheim noted that "potholes, playas, and depressions that are flooded and ponded for extended periods shall not be considered previously converted wetlands despite manipulations prior to December 23, 1985 if the area continues to meet the wetland criteria. Persons may continue to farm wetlands in the same manner they did prior to December 23, 1985," Margheim stated. "However, actions cannot be taken which affect the water regime [of the wetland] beyond that which existed on or before December 23, 1985."

Maintenance and Improvement: Existing drainage systems can be maintained under swampbuster, but according to Margheim "the final rule expressly precludes bringing new, additional wetland acreage into production through "maintenance and improvement"... Additional wetlands include wetlands and converted wetlands that have reverted as a result of abandonment of crop production and management or maintenance operations." Some 700 comments addressed this matter.

Third Party: The final rule restricted the circumstances under which a farmer could be exempted from swampbuster wetlands he farmed were converted through the actions of a third party, such as a drainage district or a neighbor. "The responsibility has been placed on the farmer seeking the benefits to show that the drainage was not part of a 'scheme or device' to avoid compliance," Margheim said.

Will Swampbuster Go Away?

As the first Title XII provision to generate controversy, the swampbuster policy provides a useful example of how implementation of the conservation provisions in the Food Security Act may generally apply. A number of conference speakers alluded to skepticism among farmers about the seriousness of congressional intent in passing swampbuster and about the rigor with which USDA will enforce the policy.

"Unfortunately, I do have some concern about the sincerity of typically production-oriented county offices making natural resource decisions," noted Risley and Budzik. One of the authors had "personally heard county ASCS personnel tell farmers that they did not think the conservation requirements would be fully implemented by 1990. Given the erratic track record of federal farm policy, many feel that these issues will 'blow over' in the next farm bill."

According to Risley and Budzik, "Overexuberance [about] the value of swampbuster must be tempered by reflections of 10 years of [experience with] Executive Order 11990, entitled 'Protection of Wetlands,' signed in 1977 by President Carter. [The Order states that] 'each agency shall provide leadership and shall take action to minimize the destruction, loss or degradation of wetlands.' It sure looked good on paper but wetlands converted in 1977 were probably receiving payments to lay idle in 1987. This Executive Order did little to slow down swampbusting in the name of production."

Risley and Budzik concluded that "swampbuster will work if:

- "USDA officials continue to stress the importance of swampbuster to their staff all the way from Washington to the field offices. Swampbuster violations at any level cannot be ignored.
- "USDA should welcome the help of outside interests in enforcing swampbuster and maintain formal procedures for investigating reported violations."

In a similar vein, Margheim pointed out, "Farmers must realize that swampbuster is law and will affect their future operations if they want to maintain eligibility for USDA program benefits. The general public must realize that changes in that giant manufacturing plant we call agriculture come slowly and primarily through voluntary actions on the part of the landowner or operator."

Chapter 5

FmHA Conservation Easements

Wildlife biologists and FmHA administrators simply do not speak the same language.

David L. Risley and Michael J. Budzik
Ohio Department of Natural Resources

"The Farmers Home Administration [FmHA] was given two, rather unique assignments under the conservation category by the 1985 Food Security Act," FmHA Administrator Vance Clark explained at the Kansas City conference. "Both involve easements for conservation purposes, one relating to farm property that we own, or will own, as we take into inventory farm land from FmHA borrowers, and the other dealing with property owned by our borrowers who need to have their farm debt restructured so that they may yet remain in business."

According to Duane Sand, resourceful farming project director for the Iowa Natural Heritage Foundation, "Easements are an important conservation tool because they allow societies to permanently prohibit certain unacceptable land uses, or to permanently require certain improvements in the public interest. Easements are a dependable and politically acceptable conservation tool because property buyers know the limits of the land and do not have to pay for property rights which should never be used." Sand noted that some 1.8 million acres are protected by conservation easements in the United States, most of them held by the U.S. Department of the Interior, and very little by USDA. Speaking of the two FmHA conservation easement provisions in the 1985 Food Security Act, Sand told the Kansas City conference that "while these provisions will never touch as many acres as the better known conservation provisions of that act, if used they can offer special protection to thousands of acres. More importantly, they can introduce the USDA to one of the most politically acceptable and economical conservation tools available."

Although FmHA had, by the time of the conference, approved only a few easement transactions, and despite some daunting obstacles to significant use of easements by the agency, speakers generally saw promise in these new conservation tools--and strong arguments for using them. "Conservation easements will work if we try," predicted David Risley, assistant administrator, and Michael Budzik, district manager, of the Ohio Department of Natural Resources Division of Wildlife. "The costs and overall benefits to the taxpayer will show that easements can define the highest and best use for many of these marginal farms. Why should one agency within USDA sell a highly erodible farm with a high corn base," they argued in their Kansas City presentation, "then a second USDA agency make crop subsidy payments, while a third spends precious staff hours convincing the new owner to control erosion. It just doesn't make sense."

Section 1314 Inventory Easements

FmHA inventory easements, authorized under Section 1314 of the act, allow FmHA to convey easements or rights-of-way for a variety of conservation purposes or land use types, including, according to Administrator Clark, but not limited to:

- "fish and wildlife habitats of local, regional or state importance;
- "floodplain and wetland areas;
- "highly erodible land as defined by the Soil Conservation Service;
- "important farmland, prime forestland, or prime rangeland as defined in the USDA land use policy regulation (9500-3);

- "aquifer recharge areas of local, regional, or state importance;
- "areas of high water quality or scenic values;
- "historic and cultural properties."

Clark pointed out that "conveyances can include easements, development rights, and restrictions. They can be made to local or state governments or private nonprofit organizations. Normally, the agency would expect reimbursement for the easement. If an easement is requested without reimbursement and it would adversely affect the value of the property, the government would closely review it before deciding to grant an easement. Under an interagency agreement, Fish and Wildlife Service personnel are assisting FmHA in identifying inventory properties eligible for the program."

Only a few easements and deed restrictions have been approved by FmHA thus far, according to Sand, who saw four obstacles to broad use of Section 1314: "The first obstacle is in identifying a convenient way to select inventory properties in need of easements. Each FmHA state office needs to obtain aerial photos and property descriptions, so that organizations familiar with easements can attempt to protect lands in that state. Second, where more than one organization or agency is interested in easements, it is essential for conservationists to coordinate their efforts and select a lead agency for each property in need of protection.... Third, in each state some additional training is probably needed for FmHA personnel and conservation professionals to understand the opportunities allowed under the law. And fourth, where deed restrictions are used rather than detailed conservation easements, there can be some question about who is responsible for monitoring and enforcing restrictions."

Risley and Buzdik see fundamental problems with the 1314 provisions. "It appears that many provisions of 1314 are in direct conflict with FmHA policy," they said in their Kansas City speech. "FmHA is directed to sell inventory property as quickly as possible, but since easements or restrictions will slow that process there is little incentive for the [local] FmHA administrator to pursue an easement even in critical habitat areas. Since they function very similarly to a bank institution, they feel that they must sell a particular property to recover as much of their money as possible from bad loans on poor properties that never should have been in production anyway. Conservation has never been an issue with FmHA so it is difficult to some in that agency to see the value of easements granted to another government agency."

Risley and Buzdik added: "For this provision to work, the rules of the game and the intent of the legislation need to be better defined. A conservation easement will almost always reduce the value of a property. Is FmHA expected to accept a loss or is the wildlife or other conservation organization expected to pay this [cost]? Who is going to determine the value of the wildlife habitat preserved or created by an easement. [We] feel that there is great public value in providing wildlife habitat but [our] colleagues in FmHA may feel differently. If organizations are expected to pay for each reduction then very few easements will be consummated. Conservation agencies and organizations have very few dollars available for buying easements so most of these must be granted."

Risley and Buzdik had two recommendations pertaining to the Section 1314 easements. "Easements should be granted to state or federal wildlife agencies or other qualifying groups on all inventory lands with wetlands. Any inventory farm that cannot adequately meet SCS technical guide specs with common local rotations or structural practices should not be sold without a conservation easement."

Section 1318 Debt Easements

"The Food Security Act provides that we at FmHA may consider--in the case of a farmer unable to keep up his payments to us--accepting an easement in

exchange for canceling a portion of the debt equal to the value of the easement," Administrator Clark explained in his Kansas City talk. "His property can be wetland, environmental-sensitive land, or highly erodible land, and the easement possibilities include conservation, recreational, or wildlife purposes." In order to be eligible, the loan must have been closed before passage of the Food Security Act, the land (except wetland) must have been cropped for the three years preceding passage of the act, and the easement must be in effect for a minimum of 50 years. Finally, as Clark noted, "the easement-debt restructuring matchup must result in the borrower being brought current in loan payments--not paying off the entire debt, but [bringing the borrower] current in scheduled payments." Personnel from SCS, the Forest Service, and the Fish and Wildlife Service will advise FmHA on specific transactions once a borrower has expressed interest in the easement-debt restructuring.

Final rules have yet to be published for Section 1318 easement-debt restructuring. As Sand noted, "the proposed rules had broad conservation objectives and favorable interpretations of the authority granted... Hopefully, Farmers Home Administration will take an enlightened attitude and publicize this debt restructuring option along with other restructuring options." Sand added, "Again, training of FmHA field personnel [and in this case SCS personnel also] will be needed to identify where and how these provisions can best be used."

Chapter 6

Conservation Planning and Education

*Now we are in the spotlight...and many eyes are focused on us.
We have the opportunity to prove that we can get the job done.*

Clarence Durban, President
National Association of Conservation Districts

Conservation plans and educational activities have long been the major tools of the soil conservation movement, but they have never been as important as they are in the wake of the 1985 farm bill. "The Food Security Act of 1985 for the first time included plans as a part of federal legislation," observed SCS Director of Conservation Planning Sherman Lewis in Kansas City. "Conservation plans are intended to be the vehicle by which conservation assistance is documented." But in order for the planning process to succeed, farmers need to be educated about the requirements of Title XII, the applicability of its various provisions to their farm, and the range of options available for complying with the law. Given USDA's estimate that as many as 80 percent of all American farmers could be affected to some degree by one or another of the Title XII provisions, a truly gargantuan educational task faces SCS, the Extension Service, conservation districts, and others in the public and private sectors. This is particularly true given the deadlines specified in the act for conservation compliance, the provision that will place the heaviest workload on USDA over the next two years.

The Kansas City conference revealed a great deal of concern about the farm bill workload compared with available staff resources and, thus, about the ability of USDA to carry out conservation planning and educational responsibilities, notwithstanding the department's official position that it can get the job done on time, given cooperation from farmers and others involved in farm bill implementation. It was also evident that many innovations in planning and education, designed to improve administrative efficiency and reach the enormous number of farmers affected by the act, have been developed by SCS offices, conservation districts, state conservation agencies, and others.

The Changing Nature of Conservation Planning

Lewis pointed out in Kansas City that there have been many changes in the nature of conservation planning over the past 50 years: "Previously, most conservation planning was done with farmers or ranchers who owned and operated their farms. Their plans were generally for the long-term conservation and improvement of their soil and water resources. They were interested in maintaining their farms in good condition to pass them along to the next generation. The conservation practices they installed were often structural ones, such as terraces and waterways, that required a large initial investment and little maintenance, and could be expected to last for many years. However, there is a trend now toward one operator farming any number of farms, owned by many different people. These operators, because of the often short-term, often oral rental agreements, do not have a long planning horizon. They must work toward conserving the soil with conservation practices that are low-cost, probably installed (or used) annually, and which require little maintenance."

Conservation tillage is a prime example. Lewis observed that farmers in general have a higher degree of understanding of conservation planning as a result of either formal education or information gleaned from farm publications or through farmer organizations.

Title XII has placed new and massive demands on the conservation planning process. For one thing, planning activities are now focused on specific fields containing highly erodible cropland. As noted earlier, some 800,000 plans may be required in nationwide implementation of conservation compliance, according to USDA estimates. "We expect that we will be helping...many farmers with whom we have had little or no previous contact," Lewis said.

Several innovations have been introduced to cope with the planning workload. Group planning essentially replicates with groups of farmers the planning process used for individual producers. "SCS and the Cooperative Extension Service in Illinois are developing a formal version of a group planning process which will be made available to each state for use in working with groups of farmers," Lewis said. "One of the significant aspects of this process is that farmers will be able to do some of the mapwork and conservation plan development with limited assistance from the Soil Conservation Service." Another technique, Lewis stated, is "the use of more generic crop sequences in conservation plans. Rather than naming a specific crop to be grown each year, the crop sequence can simply identify the percent or sequence of high residue and low residue crops.... Also, by focusing only on the highly erodible fields, it is necessary only to have the farmer consider the conservation systems that reduce the erosion problem rather than the conservation practices needed to solve all of his soil and water resource problems on the farm." Computers are in wide use within SCS to expedite the recording and printing of conservation plans.

Clarence Durban, president of the National Association of Conservation Districts, said that "with the many changes that are occurring in the way we carry out our responsibilities, districts are keeping a keen eye on the quality of the work being done under the farm bill programs.... There may be pressure to produce in quantity, but part of the district role must be to ensure that the conservation plans developed continue to reflect the high standards we have set for ourselves. While the group planning meetings...are a good example of how districts are responding to the increased workload, we must at the same time take pains not to sacrifice the quality in these conservation plans in order to achieve the quantity we desire."

Leroy Holtsclaw, area conservationist for SCS in Rock Falls, Illinois, pointed out that Food Security Act activities in his state were preceded by conservation planning initiated under a program called "T by 2000." Workload estimates for that program, like the Food Security Act programs, lead to innovations in planning and priority setting, including group planning exercises with farmers within hydrologic units. "The method involves gathering soils information (in some cases making soil map transparencies the same size as the ASCS maps) for each farm," Holtsclaw explained. "The soil information is organized into similar treatment groups based on average slope length and steepness. A number of conservation cropping systems that include crop rotations and tillage alternatives suitable for soils and acceptable to producers...are arranged as alternatives for resource management systems on cropland. One of the systems for highly erodible land is permanent cover that can be installed under the CRP. These systems are listed on separate sheets of paper in a packet and the practices to save soil intensify from the first page to the last. The decision-maker only has to flip through the pamphlet and find a set of practices that will achieve acceptable levels of soil loss as identified in the field office technical guide. The first meeting involved a group of about 30 to 50 farmers and the complete process was explained. The second meeting that followed about one week later involved from one to five people so the plans could be more specific to the farm. The goal of this meeting was the signing of the plan if possible. The time that a farmer took to complete a plan was reported as ranging from four to eight hours."

Notwithstanding such promising innovations, the Food Security Act workload was a major concern during the conference. "Perhaps the greatest single

impediment, and often the most frustrating aspect of the farm bill, is the lack of resources to address the programs adequately," said Durban. Others worried about the impact of the act's workload on other conservation programs. "The institutional framework and capability that has been built over 50 years can be dismantled rapidly...if USDA allows the very thin layer of soil conservation programs to be completely moved out in many areas," stated Gale Martin of the Mississippi Soil and Water Conservation Commission.

Education: Demand Versus Supply

The Cooperative Extension Service is the lead agency for information and education activities pursuant to the 1985 Food Security Act, and at the Kansas City conference its administrator, Myron Johnsrud, described a number of initiatives undertaken since enactment. "There have been some hesitations in our education effort," he acknowledged, "caused in large part by the dilemma of moving ahead with an education program before all the rules were finalized." Johnsrud stated that USDA has an Information and Education Task Force for Title XII. "The six USDA agencies involved in the act diverted a total of nearly \$500,000 from their 1987 funds toward the task force's budget. The task force's primary objective is to assist the state and county offices of the USDA agencies as they create and distribute farm bill information. Many information and education items--fact sheets, brochures, radio and television scripts, posters, displays, videos, and slide sets--have been developed and distributed."

But Peter Nowak, soil and water conservation specialist at the University of Wisconsin-Madison, stated that "information and education surrounding the conservation provisions in the 1985 FSA [Food Security Act] appear to have a low priority. That is not to say that information and education activities have not generated a lot of rhetoric about their importance. We do a very good job at talking about the need for information activities." But according to Nowak, "there has been little or no increase in fiscal support for information and education activities at the state or county level...[and] there is little consensus about who will inform whom about what." Overall, Nowak concluded, "Too much effort has been spent debating the nature of these provisions, while too little attention has been paid to actually implementing them." He proposed three types of information demands that required a better information supply:

1. **"Information on the applicability of the conservation provisions:** Efforts are being made to inform all land users regardless of the applicability of the FSA [Food Security Act] provisions.... A more effective approach would be to focus our limited...resources on just those land users who have land eligible for the various FSA provisions.... In parts of some states or districts, local personnel have targeted their efforts based on levels of resource degradation.... In these limited situations, informing land users on the applicability of the FSA provisions has been very successful.
2. **"Coordinating access to conservation assistance:** Extension is finding difficulty in shifting from an emphasis on production to one where conservation considerations are integrated.... There is a general lack of integration of federal FSA requirements into state and local conservation programs.... There appears to be some confusion as to which USDA agency is in the best position to create and distribute educational materials....
3. **"Design of production systems that are compatible with conservation provisions:** There is little evidence that this type of information has played a major role in past conservation education activities. Idealistic stewardship messages have been the norm.... Ignorance of accurate facts on the economics of conservation practices is creating a situation where the FSA provisions are being viewed as an unjust economic burden by many land users."

Regional Perspectives

While the provisions of Title XII in the Food Security Act are national in scope, their impact differs markedly among geographic regions. The Kansas City conference featured several discussion sessions the purpose of which was to collect regional assessments of the Food Security Act's new conservation policies and programs. A report on these discussions was presented at a plenary session near the end of the conference.

The regional discussions were lively and well-attended. Participants in the seven regional groups were asked to organize their comments around a series of such questions: What is working? What is not? Some of the common themes that emerged in at least two groups in response to these questions are presented below. Much of the value of the regional meetings derives from the specific problems identified and the recommendations offered. Those sections of each regional report are summarized below.

It is worth noting that these were rather large discussion groups--mini-conferences unto themselves--and while discussion leaders tried to reach a measure of consensus on issues, formal votes were impractical. Furthermore, the regions under which discussion groups were organized are vast, and by no means are they homogenous with respect to the scope or impact of Title XII provisions. As a result, no attempt is made to assign weight or priority to the observations of the discussion groups.

What is Working?

1. *Increased public and farmer awareness of conservation* was noted by five of the regional groups (Northeast, Southeast, North Central, South Central, and Northwest). The Northeast group, for example, observed: "The conservation provisions of the 1985 farm bill have resulted in an increased awareness of the need for soil erosion control and water quality improvement as well as the opportunities for wildlife benefits.... It has brought new farmers into the program. It has brought increased visibility with new audiences. For example, the conservation coalition that backed the legislation has provided a new perspective on the conservation program."

The Southern Plains group simply noted, "More people are talking about conservation." The Northwest group report stated that the economic understanding of conservation practices has improved through the STEEP program (Solutions to Environmental and Economic Problems). "Producers' understanding has improved, as exemplified by signups and contracts for CRP, which are going well."

2. *A greater degree of interagency cooperation and communication* was pointed to by discussants from the Northeast, Southeast, Southern Plains, Pacific, Southwest, and North Central regions. Said the Pacific regional report: "Cooperation and communication among the various agencies and with the local [soil and water conservation] districts has been enhanced by the need to work together on the Food Security Act. The local food and agriculture councils are working together well--their task is now well defined." The Northeast group reported: "Overall, the conservation provisions have resulted in better interagency cooperation, which, in turn, has resulted in a more interdisciplinary approach to problem-solving. The federal program has given states an incentive for beefing up their programs, for example, better wetland protection."

The Food Security Act "has brought administrative breakthroughs for USDA and other government agencies," noted the Southeast report. "Overall, there's unprecedented interagency cooperation and goal setting...greater awareness of

each other's problems. Fish and wildlife agencies are becoming more aware of USDA issues and programs."

3. *A greater measure of integration between conservation and commodity programs.* According to the Southeast group, "the act's legislative muscle required producers to make decisions about conservation on marginally productive land. One comment was that it forced the tie-in of commodity and conservation programs." The North Central discussants stated that "conservation is now officially regarded as a component of the commodity production system." According to the Southern Plains group, the CRP "is providing much needed and guaranteed income" and is "stabilizing land and commodity prices," functions normally associated with commodity rather than conservation programs.

4. *Improved, more efficient management and technical assistance.* As the Pacific group stated, "Morale of SCS staff in the field is improving. They can see their objective [and] this has enabled them to become more focused. They have a real 'can do' attitude now. There has been better training of federal, state, and local personnel...and their understanding of the Food Security Act provisions has improved.... In general, there's been an increase in field office efficiency--they've become more task oriented...and are making highly erodible land determinations more quickly. Technical improvements have included updating the field office technical guide, making use of the latest computer technology, and accepting the need for innovation."

The Southern Plains group reported "an increased efficiency of planning with the landowners...and an increased awareness of the field office technical guide on the part of conservation district personnel." A similar observation was made in the Northeast group: "Pressures of the farm bill have led to innovative, more efficient procedures at the conservation district field office level." In the Southeast group, discussants found that "the Food Security Act has spurred the development of technical means to address conservation problems: Soil surveys have accelerated; the enthusiasm of technical staffs has increased; conservation planning has been streamlined."

What is Not Working?

1. *Information, education, and outreach efforts need to be accelerated and improved.* While general awareness of conservation has increased in the view of most of the regional groups, several expressed concerns about farmer confusion over the conservation provisions of the Food Security Act.

"Getting information to landowners about the provisions is part of it," said the Northeast group. "The elderly, particularly those who have not been cropping their land, widows, and limited resource farmers are specific audiences with special information needs that are not being met. There is also some difficulty in making people in the Northeast realize that there is a problem with controlling erosion. Many people seem to feel that the conservation provisions pertain to other parts of the country. In fact, there is a high percentage of highly erodible or fragile land in the Northeast that cannot tolerate high erosion rates. The Northeast also has a large coastal area with associated wetlands. Certain areas, such as Delaware, do not have adequate wetland protection." This group also noted that small, widely dispersed land parcels, high turnover of ownership, and a high tenancy rate pose problems "of getting information to the right person and determining who is responsible for the operation of the farm."

"Despite the positive overall assessment," the Southeast group reported, "there's room for improvement." In the area of information and education, they said, "simple, easy-to-understand information, including information on alternative treatments needed, is necessary to ensure that we reach all producers. The Cooperative Extension System and other agencies should target their outreach to producers of all education levels and to limited-resource producers."

The Southern Plains group emphasized that "it is important but difficult to notify absentee landlords of Food Security Act requirements."

A number of these observations were echoed in a list of information and outreach problems compiled by the North Central group:

- "farmers won't acknowledge that they have an erosion problem;
- "little contact with absentee landowners;
- "inability to convince some landowners of program importance due to uncertainty about future payments;
- "confusion on PIK (payment-in-kind) certificates and their use;
- "lack of technical information on alternative practices;
- "lack of information dissemination from Washington on what other agencies are doing."

The South Central group cited "lack of producer understanding" among the major problems with the Food Security Act, and the Pacific group said "the main problem is seen as producers' lack of working knowledge of all provisions but CRP. This is especially true of sodbuster and swampbuster, where they were caught unaware of the immediate ramifications."

One frequently expressed concern was that many farmers do not feel the government will follow through with CRP payments over the long term, or with the monitoring and enforcement of sodbuster, swampbuster, and conservation compliance. There appears to be a fairly widespread perception that Title XII programs are impermanent in one way or another.

2. *The Food Security Act workload is straining farmers and existing agency staffs and resources.* The Northeast, Southeast, North Central, Pacific, and South Central regional groups all commented on this matter. "Too little staff, too little time, and too much workload," as the Pacific group succinctly put it. "This has led to difficulty in completing soil surveys in a timely fashion, for example."

In the Southern Plains, discussants found "too much paperwork is involved from the farmer's perspective.... There is an extreme volume of workload for federal and state agencies."

The North Central group pointed to the "imposition of extra work on private sector individuals (landowners and contractors), heavy or impossible workload on district employees...[and] Extension feels understaffed and underfunded for current workload."

"In the Northeast," that group reported, "the Food Security Act is viewed as an SCS program and lack of priority given by other agencies has hindered its implementation. Also, state and local goals for conservation districts are sometimes different from federal goals. There are inadequate resources to handle competing priorities within agencies." The Southeast group stated simply that "USDA and cooperating agency staffing is not adequate to meet the Food Security Act workloads and deadlines; therefore, increasing staff or pushing back the deadlines is recommended."

In this vein, the South Central group suggested that "additional technical assistance time is necessary on farms with below average management to solve conservation problems."

3. *Administrative and field office procedures need improving to expedite implementation of the Food Security Act.* A wide variety of procedural problems were noted by the regional groups. The Southeast group said, for instance, that "administrative procedures involving more than one agency are a problem in some areas. Apparently, filing systems for the AD 1026 forms are inadequate in some counties.... This...calls for timely meetings by field office and area office heads to resolve the problem and immediately issue joint staff directives." According to the Pacific group, "processing problems have arisen in the timely forwarding of Form 1026's from ASCS, FmHA, and FCIC [Federal Crop Insurance Corporation] to SCS." The Southwest group noted concerns about "the length of time it takes some county ASCS offices to get the AD 1026 and associated maps to SCS after the farmer has signed it." The group recommended that "ASCS

develop a policy to get the AD 1026 transferred to SCS for processing within 30 days of the farmer signing the document."

Several regional groups advocated a continuous CRP signup and simplified, fixed bids to expedite CRP enrollment. Elimination of alfalfa from sodbuster, or automatic waiver for alfalfa land, was recommended for similar reasons.

Regional Summaries: Concerns and Recommendations

Following are summaries of portions of the regional reports not presented in the previous section, with emphasis on specific concerns and recommendations.

Northeast

The group feels that the Cooperative Extension Service, because of its role as an information and education agency, should become more involved in information and education at the state and county level. The agency could be especially helpful in assisting producers to identify highly erodible land.

USDA should:

- Tighten the sodbuster rule to require reduction of soil loss to tolerable levels.
- Require, as applicable, conservation easement on all FmHA inventory land. Clarify transfer responsibilities under section 1314 [of the Food Security Act] to resource management organizations, for example, wildlife agencies.

Recommendations for CRP:

- Raise the regional bid pools to better reflect the high land values.
- Implement the water quality provisions in the law.
- Make erosion reduction criteria between CRP and conservation compliance consistent.
- Allow hay harvesting if used for mulch. Leave wildlife strips.
- Change the contract period from 10 years to a variable 5 to 15 years.
- Gully erosion should be considered in eligibility criteria on sites where sheet and rill erosion is less than 2T for the CRP.
- Provide additional incentives to plant trees and shrubs on CRP land.

South Central

Major problems with CRP:

- Need to enroll land in the CRP that cannot meet the conservation compliance provisions in counties that have already reached the 25 percent limit without creating an adverse economic impact.
- Law and rules are too restrictive on haying and grazing. Allow flexibility for establishment of vegetative cover.
- CRP may create an adverse impact on commodity and livestock prices when contracts expire.
- Consideration should be given to base reduction in establishing maximum acceptable rental rate.
- Eligibility requirements should be changed to encourage tree planting.
- Practices eligible for cost-sharing need to be better defined, as does the practical meaning of "establishment" of vegetative cover.

Recommendation for CRP:

- Prohibit participants from breaking out additional land and building base.

Major problems with conservation compliance:

- Factors used in the USLE [universal soil loss equation] and WEQ [wind erosion equation] and T values [soil loss tolerance values] are too subjective for a regulatory program. [Determinations of highly erodible land and

compliance are rendered in terms of these equations and T values.--Editor]

- Compliance may cause adverse economic impacts for producers, agribusiness, and others as land values may tend to decrease with more restrictive uses. Some lands may even be abandoned causing even more severe erosion problems.

- Producers are resistant to conservation compliance because it is perceived as improper intervention in farmers' affairs.

- Lack of uniform SCS planning guidelines.

- ASCS regulations for annual commodity programs are not compatible with SCS conservation plan requirements.

Conservation compliance recommendation:

- Increased funding for cost-sharing is needed to reduce financial impacts.

Recommendations for sodbuster and swampbuster:

- Alfalfa needs to be considered an agricultural commodity and not subject to sodbuster.

- Deadline for implementing a conservation plan under sodbuster should be extended.

- Definition of abandonment of wetlands needs clarity for cases where production of crops, such as rice, involve leaving the land idle for five or more years.

- Not all hydrophytic plants are true wetland plants.

- Wetland determinations between counties and states need to be more consistent.

Major problems with conservation easements:

- Regulations need to be finalized and questions about policy answered.

- Lack of publicity and information.

- Disposal of land is occurring before the Fish and Wildlife Service can review for possible easement.

Northern Plains

Major problems with CRP:

- The high cost of seed required for seedlings.

- Lack of control on grass seed quality.

- Inability to get enough acres planted to trees.

- CRP payments are high enough to attract speculators.

- CRP payments are competing with rental values of land.

- Farmers are placing their land in CRP and then underbidding young farmers for the available rental land.

- Potential adverse effects on the agricultural infrastructure of rural communities.

- The bidding procedure does not reflect land productivity.

- Weed control requirements are not being met.

- Impact of CRP payment on Social Security eligibility is unclear.

- Lack of public access to CRP land.

- Loss of crop base on CRP land.

- Long-term management not given enough emphasis in planning CRP recommendations.

- There is an unknown impact on the rancher.

- The lack of grazing or other use of CRP seeded acreage will be detrimental to stand.

- There is a lack of planning to ensure that CRP acres will remain in cover after the contract expires.

- We lack guidance on when a CRP stand is established.

- CRP land is a habitat for grasshopper and Russian wheat aphids.

- The location of CRP acreage should be public knowledge.

Recommendations for CRP:

- Open the bidding process to a continuing signup so that the CRP can be available as an option in conservation planning for highly erodible land.
- Develop economic incentives for the CRP participant to provide public access to CRP acreage.
- Develop plans to deal with desired outcome of CRP land beyond the 10 years of contract.
- Provide for perpetual easements to extend the CRP beyond 10 years.
- CRP payments should be protected from FmHA administrative offsets.
- Expand the CRP target acreage from 45 million acres to 65 million or 70 million acres.
- Use proven management practices on CRP land during the contract period to improve the stand for future grazing.
- Reform the CRP bidding system to make it more equitable within and among bid areas.
- Offer farmers an option to extend CRP contracts for an additional 5 to 10 years.
- Improve incentives for planting trees and for wildlife habitat improvement.
- Conduct an economic impact study in those counties with more than 25 percent of their cropland in the CRP and evaluate what would happen if the 25 percent limit were increased.
- Allow placing the most highly erodible sections of fields ("shoulders") in CRP rather than whole fields. Also allow multiple windbreaks.
- When determining CRP acres planted to trees, include windbreaks and wildlife woody plantings in the total acreage.
- Reconsider the requirement to own land for three years for CRP eligibility.
- Require the landowner to retain ownership of CRP land for at least the first three contract years.
- Provide opportunities to reconsider plans and plantings to provide for additional cost-sharing for improvement practices.
- Limit CRP participants from breaking out new land and increasing production, regardless of whether it is highly erodible land or not.

Major problem with sodbuster:

- Plowing up alfalfa in rotation is considered sodbusting.

Recommendation for sodbuster:

- Remove alfalfa in rotation from being considered as sodbusting when it is plowed, and use conservation compliance provisions to cover these fields.

Major problem with conservation easements:

- Delay in FmHA debt reduction rule.

Recommendation for easements:

- Make criteria for conservation easements compatible with the tax treatment extension act of 1980.

Problems with conservation compliance:

- We are behind schedule in developing conservation compliance plans.
- There is a lack of understanding of how the field office technical guide is developed and what is included in the field office technical guide.
- There is a misunderstanding of T value.
- There are problems in maintaining crop bases when changing to other crops.

Recommendation for compliance:

- Allow substitution of crops without affecting crop bases.

Problems with other issues:

- There is a lack of cost-share money to apply conservation practices.
- The secretary of agriculture is not using the multiple-year set aside authority to provide cover.

- There is no guarantee as to when the 50 percent cost-share payment will be received by the farmer.
 - Media need to report on more than just the agricultural subsidy and recognize what positive results are coming from the Food Security Act.
- Recommendations for other issues:**
- Provide more cost-share money to help install needed conservation practices.
 - Develop a suitable formula for land class values for tax purposes. This is a state issue. New York and some other states have done work in this area.
 - Require the secretary of agriculture to carry multiyear set-aside provisions.
 - Provide for local input in field office technical guide development for better understanding of contents.
 - ASCS offices should issue checks early enough so that the farmer can get the income in the specified tax year.
 - Require mandatory cover crops on all set-aside acres.
 - Do not permit any harvest whatever on idle acres.
 - Prevent double-cropping on all farm program acreage.
 - Clarify how rural development and conservation programs fit together.

Southwest

Major problems with CRP:

- There is a lack of good quality grass seed at a reasonable price.
- Many farmers are concerned whether the government will appropriate funds to cover the annual CRP payments.
- ASCS's policy in cost sharing for weed control on CRP acres and its impact on the successful establishment of a grass seeding.

Recommendations for CRP:

- Evaluate the need to regulate the grass seed industry to insure quality control.
- Change the eligibility criterion for tree planting to 2T and the predominance criterion from two-thirds of a field to one-third of a field.
- Some of the group recommended allowing haying, grazing, or burning in certain situations; others disagreed.

Problems with conservation compliance:

- The uncertainty among conservation districts as to their role in the appeals process and also their liability associated with approving or disapproving a conservation plan.
- The change from the T to 2T standard.
- What are the ephemeral and concentrated flow erosion treatment requirements under alternative conservation systems?

Recommendation for conservation compliance:

- Clarify the treatment requirements for ephemeral and concentrated flow erosion under alternative conservation systems.

Major problems with sodbusting:

- Allowing the use of alternative conservation systems on sodbusting native range.
- Classifying alfalfa and grasses in rotation as "sodbusting."

Recommendations for sodbusting:

- Change the law, rules, or procedures such that breaking out of alfalfa or grass in rotation is not considered sodbusting.
- When sodbusting native sod, the treatment requirement shall be set at the T level of the soil.

Major problems with conservation easements:

- The time it is taking to enact the conservation easements provision.
- The apparent lack of communication between the FmHA national office and local offices on the deed restriction procedures.

Recommendations for conservation easements:

- Change FmHA inventory land to allow more of it to be granted to wildlife and recreational interests.

Southeast**Major problems with CRP:**

- Eligibility criteria for CRP should match criteria used for the other provisions.
- A barrier to participation in CRP is the subsequent reduction of base and allotments.
- Landlord/tenant relationship: There is divergent opinion on whether the landlord or tenant should be held accountable.
- Obtaining adequate cropping histories.
- There is some question as to the federal and local commitment to monitoring and enforcing the conservation provisions.
- The definition of "operating unit" needs to be spelled out for experiment stations and prisons.

Recommendations for CRP:

- Requirements for establishing and maintaining grass or tree cover should be set for CRP participants.
- Additional incentives should be provided for tree planting under CRP.
- Cost-sharing practices should be established for no-till and conservation tillage when these practices are required in the farm plan.
- Allow the producer to use witnesses rather than written documentation when obtaining cropping histories.
- Each prison system should be a separate entity and an operating unit in itself.

Major problems with conservation compliance:

- Producers who use a sod-based rotation to meet the conservation compliance provision should not have to lose their commodity base--similar to set aside or diversion.
- Some highway department crews are ignoring basic conservation (sediment control) practices. Their actions are jeopardizing the eligibility of nearby farms, which are otherwise complying with the conservation provisions of the Food Security Act.

Recommendations for conservation compliance:

- Small acreages should be exempted from compliance provisions.
- Tax credit should be given for costs of Food Security Act compliance.
- Limited resource farmers and ranchers should be granted "forgiveness loans" for costs of successful compliance practices.

Recommendation for sodbuster:

- Producers should be allowed to do no-till planting of small grains into perennial grass pasture without sodbuster penalties.

Pacific**Major problems with CRP:**

- Farmers haven't been persuaded that the contract really is for 10 years.
- How assured is appropriation beyond 1989?
- What happens to plantings if agricultural emergency allows cancellation of the contract before the 10 years are up?
- Should planting recommendations be made on the basis of conservation and not necessarily on productive cover, which would be valuable after the end of the contract?
- Tree planting is lagging because of low-bid pools in high rainfall regions of counties.
- High quality grass seed of recommended varieties is scarce.

- How will conservation compliance apply to CRP cover destruction at the end of the contract?
 - There is a high potential of stand damage by fire.
 - State noxious weed laws are variable, and there is a lack of uniformity in weed enforcement in state CPO's.
 - Vegetation control in lieu of grazing is needed for stand maintenance.
 - Under the present system of setting bid levels, there are inequities.
- The counties in the West are large, and they are prohibited from breaking them up.

Recommendations for CRP:

- CRP bids should be set based on yield, climate, and soil loss.
- More tree planting should be encouraged by such incentives as a one-time bonus, a percentage increase for annual rental payments, a longer contract period, or increased cost-sharing.
- There should be a multagency policy handbook for all five provisions.
- There needs to be more planning consistency.
- Allow more local discretion in setting CRP bid levels.
- The field offices want more flexibility in making highly erodible land determinations. Some land should be declared highly erodible that has not, and some land has been declared highly erodible that should not have been.

Major problem with sodbuster/swampbuster:

- Lack of working knowledge of all provisions.

Major problem with conservation easements:

- Deed restrictions are creating problems with future buyers.

Recommendation for conservation easements:

- Publish final rule for conservation easement.

Major problem with conservation compliance:

- ASCS staff needs more training in order to make field checks for conservation compliance.

Recommendation for conservation compliance:

- ASCS should allow more flexibility to modify the crop acreage base for residue purposes to meet conservation compliance provisions.

North Central

Major problems with CRP:

- Possible inconsistencies in field office technical guide.
- Some counties are not willing to cost-share warm season grasses because of high seed prices.
- Lack of control of noxious weeds on set-aside and CRP acreage.
- Very low CRP signup in some states.
- Multiyear set-asides authorized in the Food Security Act are not being used.
- Water quality has not been addressed despite references in the farm bill.
- Need broader societal representation in determining farm program benefits at the county level instead of current farmer heavy system.
- Annual mowing is not permitted by regulations but allowed and required in some states.
- Better explanations of districts' role and responsibilities in conservation planning and approval are needed.
- Complexity instead of clarity of rules should be addressed.
- Farmers won't acknowledge that they have an erosion problem.
- Little contact with absentee landowners.
- Inability to convince some landowners of program importance due to uncertainty about future payments.
- Insufficient research on T, soil productivity, etc.
- Confusion on PIK certificates and their use.

- Lack of availability of technical information on alternative practices.
- Lack of information dissemination from Washington on what other agencies are doing.
- Alfalfa and other hay crops in a rotation not considered an agricultural commodity.
- Many landowners are still trying to wait out the possibility of relaxing deadlines for rules.
- CRP payments are not indexed for inflation.
- On grass covered CRP land, producers are not allowed to plant trees at own expense.
- Landowners whose fields do not meet the two-thirds highly erodible land criteria for CRP benefits sometimes fall under the one-third highly erodible land criteria for cross compliance.
- Crop base exchanges are limited to (or by) crop residue levels.
- CRP signups can't compete with set-aside payments.
- Low signup in tree planting.
- Low recognition of timber products as a crop.
- High cost of required permanent structures is a problem.
- Some feel the use of a bid system in CRP is inefficient.

Recommendations for CRP:

- Allocation of funds for information and education.
- Increase cost-effectiveness for CRP by returning to real bid system.
- Have a continuous CRP signup.
- Let alfalfa in rotation waive immediate need for plan.
- Adopt legislation to set up trust funds for demonstration funded by a checkoff system.
- Encourage multiyear set-asides as in law.
- Need a long-term funding commitment to program rather than annual appropriations.
- Provide adequate staffing for all affected agencies.
- Increase incentive rates.
- Another corn bonus.
- Waive the two-thirds requirement if the farmer is willing to bid whole farm into CRP.
- Increase incentives for tree planting.
- Lengthen contract period to 20 years for trees.
- Allow eligibility for fields planted to trees to be one-third highly erodible land versus two-thirds highly erodible land.
- To increase eligibility for forestry, include stream corridors.
- Lower eligibility requirements for trees to 2T.

Problems with sodbuster/swampbuster:

- Only a few have lost eligibility because of noncompliance with sodbuster and swampbuster.
- Inconsistent interruption of swampbuster rule between districts.

Problem with conservation compliance:

- Conservation compliance requires treatment of cropland but this idea is not reinforced in annual programs.

Recommendation for conservation compliance:

- Maintain flexibility to meet conservation compliance objectives.

Problem with conservation easements:

- Little action has been taken regarding conservation easements (sections 1314 and 1318 of the Food Security Act).

Recommendation for conservation easements:

- Investigate easements as long-term solution (rather than permanent conservation structures, like terraces).

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CONFERENCE PROGRAM

**Sunday
November 1**

- 4:00-9:00 p.m. **Registration
Lobby**
- 6:00-9:00 p.m. **Exhibits / Poster Papers
Exhibition Hall**
- 7:30-9:00 p.m. **Icebreaker (social)
Exhibition Hall**

**Monday
November 2**

- 7:30-8:30 a.m. **Continental Breakfast
Exhibits / Poster Papers
Exhibition Hall**
- 8:30 a.m. **General Session
Atlanta Room**
- Presiding: Barbara Osgood, Assistant
Director, Economics and Social
Sciences Division, Soil Conservation
Service, Washington, D.C.*

Welcome
Donald Van Meter, President, Soil
and Water Conservation Society,
Muncie, Indiana

Conference Objectives
Marlin Edwards, Agricultural
Resources Specialist, Pioneer
Hi-Bred International,
West Des Moines, Iowa

Keynote Address
Peter Myers, Deputy Secretary,
U.S. Department of Agriculture,
Washington, D.C.

- 9:10 a.m. **How Goes Implementation:
The Conservation Reserve**
- Federal Perspective**
Milton Hertz, Administrator,
Agricultural Stabilization and
Conservation Service,
Washington, D.C.
- State/Local Perspective**
Greg Larson, Program Specialist,
Minnesota Board of Soil and
Water Resources, St. Paul
- Private Perspective**
Dean Kleckner, President,
American Farm Bureau
Federation, Rudd, Iowa
- Viewpoints**
Ralph Grossi, President, American
Farmland Trust, Washington,
D.C.
- Roger Hokck, President, Kellogg-
Sully Bank and Trust, Kellogg,
Iowa

10:40 a.m. **How Goes Implementation:
Conservation Compliance and
Swampbuster**

Federal Perspective
Wilson Scaling, Chief, Soil
Conservation Service,
Washington, D.C.

State/Local Perspective
Ray Ledgerwood, Area Field
Representative, Washington State
Conservation Commission,
Pullman

Private Perspective
Myrl Mitchell, President, Plains
Cotton Growers, Lenora, Texas

Viewpoints
Bill Laycock, Head, Department
of Range Management,
University of Wyoming,
Laramie

Robert Warrick, Co-chairman,
Agricultural Issues Committee,
and member, Agricultural
Campaign Steering Committee,
Sierra Club, Meadow Grove,
Nebraska

1:15 p.m. **General Session
Atlanta Room**

*Presiding: Lynn Ketelsen, Farm
Director, Linder Farm Network,
Wilmar, Minnesota*

**How Goes Implementation:
Swampbuster and Conservation
Easements**

Federal Perspective (Swampbuster)
Gary Margheim, Director, Land
Treatment Program Division, Soil
Conservation Service,
Washington, D.C.

**Federal Perspective (Conservation
Easements)**

Vance Clark, Administrator,
Farmers Home Administration,
Washington, D.C.

State/Local Perspective

Dave Risley, Assistant
Administrator, Division of
Wildlife, Ohio Department of
Natural Resources, Columbus

Viewpoints

Lloyd Jones, Supervisor, North
Dakota Wetland Habitat Office,
U.S. Fish and Wildlife Service,
Bismarck, North Dakota

Duane Sand, Resourceful Farming
Project Director, Iowa Natural
Heritage Foundation, Des
Moines

2:45 p.m. **How is the Concept and Definition
of "Highly Erodible Land" Working
in Actual Practice and What Soil
Loss is Tolerable?**

Charles Benbrook, Executive
Director, Board on Agriculture,
National Research Council,
Washington, D.C.

- Mack Gray, Special Assistant to the Chief for Congressional and Public Liaison, Soil Conservation Service, Washington, D.C.
 Martin Burch, Area Conservationist, Soil Conservation Service, St. Joseph, Missouri
- 3:30 p.m. **The Changing Nature of Conservation Planning**
Federal Perspective
 Sherman Lewis, Director, Conservation Planning Division, Soil Conservation Service, Washington, D.C.
State Perspective
 Gale Martin, Executive Director, Mississippi Soil and Water Conservation Commission, Jackson
Local Perspective
 Clarence Durban, President, National Association of Conservation Districts, Plain City, Ohio
Viewpoints
 Larry Neppel, District 3 Vice-president, American Society of Farm Managers and Rural Appraisers, Fort Dodge, Iowa
 Leroy Holsclaw, Area Conservationist, Soil Conservation Service, Rock Falls, Illinois
 Jim Jacobs, President-elect, Land Improvement Contractors of America, Scottville, Michigan
- 5:00 p.m. **Regional Discussion Groups**
- Tuesday**
November 3
- 7:30-8:30 a.m. **Continental Breakfast Exhibits / Poster Papers**
 Exhibition Hall
- 8:30 a.m. **General Session**
 Atlanta Room
- Presiding:* Don Muhm, Farm Editor, *The Des Moines Register*, Des Moines, Iowa
- Meeting the Information and Education Challenge**
 Myron Johnsrud, Administrator, Extension Service, Washington, D.C.
- Viewpoints**
 Peter Nowak, Associate Professor and Extension Soil and Water Conservation Specialist, University of Wisconsin, Madison
 James Ladlie, President, Agri-Growth Research, Inc., Hollandale, Minnesota
 Don Baloun, District Conservationist, Soil Conservation Service, Marshalltown, Iowa
- 9:30 a.m. **Monitoring and Evaluating the Effectiveness of the Conservation Provisions**
 Ken Cook, Senior Associate, The Conservation Foundation, Washington, D.C.
 Jeff Zinn, Analyst and Specialist in Natural Resources Policy, Congressional Research Service, Washington, D.C.
 John Miranowski, Director, Resources and Technology Division, Economic Research Service, Washington, D.C.
 Robert Lentz, Director, Cooperative Forestry, U.S. Forest Service, Atlanta, Georgia
- 10:35 a.m. **Achieving Integrated Resource Management Goals**
Improved Pasture and Range Vegetative Cover
 Fee Busby, Director of Extension, Cooperative Extension Service, University of Wyoming, Laramie
Water Quality Improvement
 Will Erwin, Special Advisor to the Administrator, U.S. Environmental Protection Agency, Bourbon, Indiana
Tree Planting
 Dale Robertson, Chief, Forest Service, Washington, D.C.
Wildlife Habitat Improvement
 Larry Jahn, President, Wildlife Management Institute, Washington, D.C.
- 1:15 p.m. **Regional Discussion Groups**
- 2:00 p.m. **General Session**
 Atlanta Room
- Presiding:* Norm Berg, Washington, D.C. Representative, Soil and Water Conservation Society, Washington, D.C.
- Impacts of the Conservation Title on the Nation's Agricultural Production System**
 Ken Bader, Chief Executive Officer, American Soybean Association, St. Louis, Missouri
 John Johansen, Vice-president of Sales Support, Deutz-Allis Corporation, Waukesha, Wisconsin
 Marty Strange, Director, Center for Rural Affairs, Walthill, Nebraska
- 3:15 p.m. **Regional Discussion Group Reports**
- 3:50 p.m. **A Look Ahead**
 George Dunlop, Assistant Secretary for Natural Resources and Environment, U.S. Department of Agriculture, Washington, D.C.

Papers presented at the conference, or excerpts therefrom, appear in the January-February 1988 issue of the *Journal of Soil and Water Conservation*, the official publication of the Soil and Water Conservation Society. Copies of the *JSWC* issue are available for \$6.00 each from SWCS, 7515 N.E. Ankeny Road, Ankeny, Iowa 50021-9764; (515) 289-2331.

Soil Erosion By Water

United States Department of Agriculture
Soil Conservation Service

Agriculture Information Bulletin 513





Soil Erosion By Water

Foreword

This book is a guide to the soil erosion problem in the United States. It is intended for the general public, for the farmer, and for the professional soil conservationist.

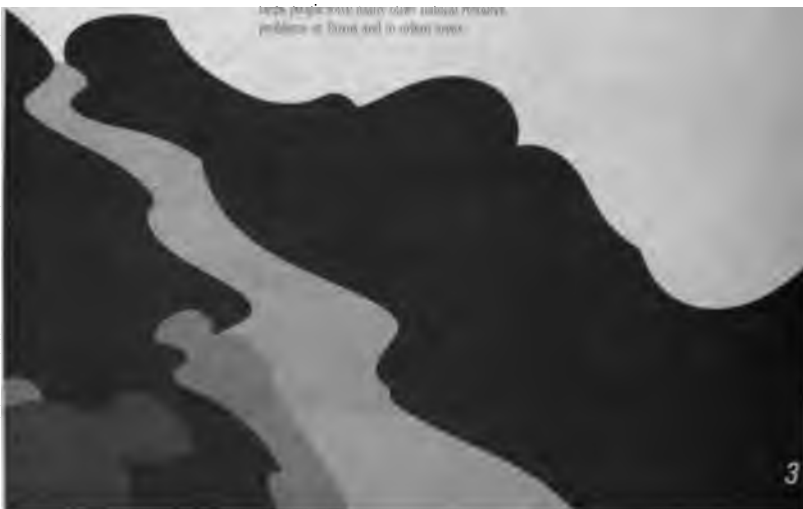
Why is soil erosion a problem? Why is it so important? How can it be controlled? These are the questions that this book seeks to answer.

The book is divided into three parts. The first part discusses the soil erosion problem in general. The second part discusses the soil erosion problem in the United States. The third part discusses the soil erosion problem in the United States in more detail.

In the past, soil erosion has been a problem in many parts of the United States. It is still a problem in many parts of the United States. It is a problem in many parts of the United States. It is a problem in many parts of the United States.

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Why control erosion?

One of the most serious threats to the health of our nation's waterways is erosion. Erosion is the process by which soil is removed from the land by the action of water or wind. It is a natural process, but it can be accelerated by human activities such as deforestation, agriculture, and construction.

Erosion can cause significant damage to our infrastructure, including roads, bridges, and dams. It can also pollute our waterways with sediment, which can harm aquatic life and reduce the oxygen content of the water.

Therefore, it is essential to take steps to control erosion. This can be done through a variety of methods, including planting trees and shrubs, using erosion control blankets, and installing structures such as check dams and silt fences.

By controlling erosion, we can protect our infrastructure, improve the health of our waterways, and prevent the loss of valuable soil. It is a simple but effective way to ensure a sustainable future for our nation.

Soil erosion is a major problem in many areas of the United States. It is caused by the action of water and wind on the soil surface.

There are many factors that contribute to soil erosion, including the type of soil, the amount of rainfall, and the slope of the land. In general, erosion is most severe in areas with heavy rainfall and steep slopes. The loss of soil can have a significant impact on the productivity of the land and the health of the environment.

So these are the people that are doing the work of erosion control. They are the people who are making the difference between a healthy and a degraded environment.



Figure 1 Onfarm damage from erosion

How erosion became

O

ver the years, erosion has been a major factor in the development of the landscape. It has shaped the mountains, valleys, and plains that we see today. The process of erosion is a slow but steady one, and it has been going on since the Earth was first formed. The forces of erosion are gravity, wind, and water. Gravity pulls the earth's surface down, while wind and water erode the surface by carrying away soil and rocks. The result is a landscape that is constantly changing, but in a way that is predictable and orderly.

When the land is first formed, it is a smooth, flat surface. But as the forces of erosion begin to work, the surface begins to break up. The first step is the formation of small hills and valleys. These are formed by the erosion of the surface by wind and water. As the hills and valleys grow larger, they begin to shape the landscape into a more complex form.

As the hills and valleys grow larger, they begin to shape the landscape into a more complex form. The next step is the formation of mountains and plains. Mountains are formed by the erosion of the surface by wind and water, while plains are formed by the erosion of the surface by wind and water. The result is a landscape that is constantly changing, but in a way that is predictable and orderly.

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Figure 2. A very old and stable landscape

When the land is first formed, it is a smooth, flat surface. But as the forces of erosion begin to work, the surface begins to break up. The first step is the formation of small hills and valleys. These are formed by the erosion of the surface by wind and water. As the hills and valleys grow larger, they begin to shape the landscape into a more complex form.

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Most of the training for conservation help is provided by the research and land grant universities and USDA's Agricultural Research Service. Some conservation work is done for cost-sharing by USDA's Agricultural Stabilization and Conservation Service. Another work closely with USDA is provided by the Bureau of Land Management in the Department of the Interior, the Environmental Protection Agency, and other federal, state, and local agencies.



Figure 3. An example of geologic erosion.

Geologic erosion

Geologic erosion is the wearing away of the Earth's surface by the forces of water and wind. It occurs in an environment largely unaffected by the activities of people. Geologic erosion usually occurs very slowly.

For example, in humid climates that support forests or grasslands, vegetation holds the soil in place. New soil forms continuously, offsetting all or part of the slow geologic erosion.

In arid climates such as the Southwest, the plant cover is thin and fragile in many areas. Over thousands of years, erosion by rare but powerful storms has left behind towering mesas, sheer canyons, and natural rock sculptures (Fig. 3).

Geologic erosion can also occur in landslides. Landslides generally result from inherent geologic instability, but they can be triggered—and their consequences made worse—by drilling, digging, or farming in areas of unstable soils.

Accelerated erosion



Figure 4 The effects of overgrazing



Figure 5 Heavy machinery use and

Water erosion is a natural process, but it can be accelerated by human activities. **geologic erosion** is the process by which the earth's surface is worn down by the action of water. This process is accelerated by human activities such as deforestation, overgrazing, and the use of heavy machinery. These activities remove the protective layer of soil and vegetation, leaving the soil exposed to the elements. This leads to increased erosion and soil loss.

accelerated erosion. This is the process by which the earth's surface is worn down by the action of water, but at a much faster rate than natural erosion. This is caused by human activities such as deforestation, overgrazing, and the use of heavy machinery. These activities remove the protective layer of soil and vegetation, leaving the soil exposed to the elements. This leads to increased erosion and soil loss.

As a result, the soil becomes more erodible, and the rate of erosion increases. This leads to a loss of topsoil, which is essential for plant growth. In some cases, erosion can lead to the formation of gullies and other features that can be difficult to repair. This is why it is important to take steps to prevent accelerated erosion, such as planting trees and using erosion control techniques.



Figure 6 An example of bench leveling to prevent erosion in an urban area.

When a forest is stripped of its trees, when logging roads and clear cuts are poorly designed and located in places where harvested trees aren't replaced, the soil is left vulnerable to erosion. This leads to a loss of topsoil, which is essential for plant growth. In some cases, erosion can lead to the formation of gullies and other features that can be difficult to repair. This is why it is important to take steps to prevent accelerated erosion, such as planting trees and using erosion control techniques.

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Major types of erosion by water

In **splash erosion**, raindrops break the bonds between soil particles and splash them a short distance (Fig. 7). These particles are then much more vulnerable to erosion by water flowing over the surface.

When rain falls faster than the soil can absorb it, water begins to collect and flow over the ground surface. **Sheet erosion** can begin when this surface water begins to carry along particles that were detached by raindrops.

Surface flow soon establishes paths. If the soil is unprotected, some of these paths become rills, small eroding channels. In **rill erosion**, water flowing through rills readily detaches soil from their sides and bottoms (Fig. 8). As it moves farther down slope, flow in rills becomes more erosive, causing the rills to enlarge and join with others.

The topography of many landscapes is such that water tends to collect in a few major waterways before leaving the fields. **Concentrated-flow erosion** is erosion by water flowing in channels that may range from a large rill or a small gully. Rills are crossed by ridges, but channels eroded by concentrated flow tend to erode at the same location each year. If allowed to continue, erosion by concentrated flow can form a gully.

Gully erosion is difficult to control. In a gully, soil is rapidly removed by water gushing over the "headcut" (the uphill end) of the gully, water scouring the gully's bottom, and water eroding soil external that falls slumped from the gully's sidewalls. The slope at the headcut is nearly vertical, causing the runoff flowing over it to be highly erosive so that the gully advances upslope (Fig. 9).

In any given place, the processes of splash, sheet, rill, concentrated-flow and gully erosion may all be active and account for considerable soil loss. Or erosion may be chiefly by only one or two of these processes.

Mass erosion or slumping occurs when a hillside becomes so saturated by water that large areas of soil slide or creep downhill. Gullies can form rapidly in these slide areas.



Figure 7. Splash erosion.



Figure 8. Rill erosion.



Figure 9. Gully erosion.

How water erodes soil

All types of erosion by water (see box p. 28) occur in a three-part process. First, the erosive force of raindrops or flowing water breaks the natural physical and chemical bonds between soil particles. Then, surface flow carries particles downslope. Where the erosive energy of the water decreases — for example, at the bottom of a hill — soil particles are deposited as sediment.

Erosive water may begin as raindrops as surface runoff from precipitation or as water from an irrigation system. Flowing water also includes the flow of natural or artificial channels or water that surges as steep hillsides and erodes if it flows into slumping.

Most soil movement on land takes place through a combination of water and other soil-caused means. Rainfall and its associated surface runoff

Water erodes soil through three types of erosion: splash erosion, surface runoff, and stream erosion. Splash erosion occurs when raindrops strike soil, causing soil particles to be dislodged. Surface runoff occurs when water flows over the soil surface, carrying soil particles away. Stream erosion occurs when water flows in a channel, cutting into the soil and carrying soil particles away.

- 1. The erosive power of raindrops
- 2. The erosive power of surface runoff
- 3. The resistance of the soil to erosion

The forces and energy that cause erosion are in a constant state of flux. Wind, rain, and spring rains erode soil at different rates, and the amount of soil that is eroded depends on the amount of water that is flowing over the soil. The amount of soil that is eroded also depends on the amount of water that is flowing over the soil.

Hydrology is the study of water and its behavior on Earth. It is the study of the water cycle, which includes precipitation, runoff, infiltration, and evaporation. Hydrology is a branch of geology and is closely related to other earth sciences.

describes the inter-relationships between water and soil resistance. The major relationships must be known before erosion control can be planned.

Rainfall

In general, rainfall is the erosive force of the most common natural cause of erosion. The rate of erosion is directly related to the amount of rainfall.

• The amount of rainfall is a major factor in determining the rate of erosion. The amount of rainfall is directly related to the amount of erosion. The amount of rainfall is a major factor in determining the rate of erosion.

For more information on erosion, see the article "Erosion Control" on page 245.

of the forces. Moisture is the primary cause of soil erosion. Moisture causes soil particles to be dislodged and carried away by surface runoff. The amount of soil that is eroded depends on the amount of water that is flowing over the soil. The amount of soil that is eroded also depends on the amount of water that is flowing over the soil.

Hydrology is the study of water and its behavior on Earth. It is the study of the water cycle, which includes precipitation, runoff, infiltration, and evaporation. Hydrology is a branch of geology and is closely related to other earth sciences.

Major factors that affect erosion are the amount of rainfall, the amount of water that is flowing over the soil, and the resistance of the soil to erosion.

velocity of the rainfall and the slope of the land. The frequency, intensity, and duration of storms (other conditions being equal) also affect erosion. Other conditions being equal, erosion is greater with large storms than with small ones, with short, high-intensity storms than with a storm of equal total rainfall, and with storm gusts or heavy rain that falls in a short time.

The erosion of soil particles is related to the velocity of the top of the raindrops. The velocity of the top of the raindrops is directly related to the amount of water that is flowing over the soil. The amount of water that is flowing over the soil is directly related to the amount of rainfall.

Ground cover

Land cover is the natural or artificial covering of the earth's surface. It is the layer of soil and other materials that is on top of the ground. Land cover is a major factor in determining the rate of erosion. The amount of soil that is eroded depends on the amount of land cover that is on the soil.

- The amount of land cover is a major factor in determining the rate of erosion.
- The amount of land cover is directly related to the amount of erosion.
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Soil formation

Every soil has a history that affects its vulnerability to erosion. Soil forms through weathering and other processes that act on "parent material" — bedrock or other geologic material. Climate affects the rate of weathering, rates of geologic erosion and deposition of parent material, soil water content, and soil temperature. Relief — the configuration of the land surface — affects slope and drainage patterns on the landscape. Organisms — plants, animals, and micro-organisms — affect soil development chiefly by mixing soil materials, and adding organic matter. Over time — hundreds, thousands, even millions of years — climate, relief, and organisms form unique soils from the raw parent material.

Nearly all soils develop a series of different layers. In most cases, the soil's major layers are called the **surface** or **topsoil**, the **subsoil**, and the **underlying parent material** (Fig. 10). The content of organic matter is generally highest in the surface layer, then lower in the subsoil, and lower still in the

parent material. By measuring the properties of each soil layer and by observing how various soils respond to soil management and to environmental conditions, farmers can estimate a soil's potential.



Figure 10. A soil profile

Soil

Chapter 10 discusses the soil's composition and the soil's physical and chemical properties. It also discusses the soil's biological properties and the soil's role in the ecosystem.

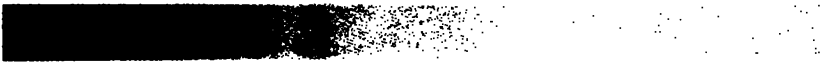
- Biology
- Soil
- Structure and
- The soil water cycle

Texture refers to the soil's physical properties. It is determined by the soil's particle size distribution. The soil's texture is determined by the relative amounts of sand, silt, and clay in the soil. The soil's texture affects its ability to hold water and nutrients. The soil's texture also affects its ability to resist erosion.

Slope

The slope of the land affects the soil's ability to hold water and nutrients. The soil's ability to hold water and nutrients is affected by the soil's texture, the soil's organic matter content, and the soil's structure. The soil's ability to resist erosion is also affected by the soil's texture, the soil's organic matter content, and the soil's structure.





and indicates the nature of the soil structure. Soil structure is the arrangement of soil particles and aggregates in the soil. It is the result of the physical, chemical, and biological processes that occur in the soil.

The soil structure is affected by many factors, including the type of soil, the climate, the vegetation, and the human activities. Soil structure is an important property of the soil that affects its ability to hold water, nutrients, and air.

Soil structure is also affected by the soil's texture, which is the relative proportion of sand, silt, and clay in the soil. Soil texture is a primary factor in determining soil structure.

Soil structure is also affected by the soil's organic matter content. Organic matter in the soil helps to bind soil particles together, creating a stable soil structure. Organic matter also improves the soil's ability to hold water and nutrients.

Organic matter is the remains of plants and animals that have died and decomposed in the soil. It is a vital component of the soil, providing nutrients and helping to form soil structure.

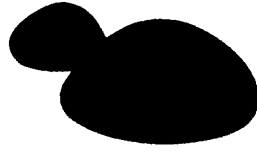


Figure 11 A peo

Soil structure is the arrangement of soil particles and aggregates in the soil. It is the result of the physical, chemical, and biological processes that occur in the soil. Soil structure is an important property of the soil that affects its ability to hold water, nutrients, and air.

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Erosion and soil productivity

Researchers, conservationists, and farmers know that erosion can rob the soil of its productivity. But they also know that erosion does not simply remove soil by some fixed number of bushels per ton of soil lost.

A rule of thumb is that 1 inch of topsoil takes about 40 years to form from subsoil material. Subsoil forms from the parent material even more slowly. Since 1 inch of soil from 1 acre weighs about 150 tons, many conservationists believe that erosion should be held at or below 5 tons per acre per year or, most deep soils, at this rate it would take 30 years to lose that 1 inch of soil, therefore soil is being formed nearly as fast as it is lost.

Over the years, the Soil Conservation Service has established **soil loss tolerance (T)** levels. These T levels indicate the maximum average annual erosion rate consistent with sustaining the soil's long-term productivity and with avoiding such problems as severe rilling, gullying, and nutrient losses.

For many years, SCS erosion control planning with land users has focused on the goal of reducing average annual erosion to T. The T level, however, does not consider other damage from erosion, such as water pollution from sediment and associated nutrients and pesticides.

In some parts of the country, loss of productivity caused by erosion is easy to see - in stunted crops, low yields, bare spots, crops burned by mud, and gullies, chowing into productive fields. But measuring the actual damage on specific soils can be very difficult. Besides erosion, crop yields are affected by many other physical, chemical, climatic, management, and soil factors.

Many questions have to be answered to obtain a meaningful estimate of erosion's effect on the productivity of a particular field, including the following:

Lost productivity

Erosion damage to soil productivity takes many forms. Some of the most common are the following:

- With the loss of topsoil, the soil has a lower capacity to hold and store water for use by plants. The soil is more vulnerable to drought.
- Erosion results in the loss of organic matter and of plant nutrients that are already present in the soil or are applied in chemical fertilizers. Some nutrients are lost because they are attached to eroded soil particles, water-soluble nutrients are lost in surface runoff.
- Uncontrolled runoff and deposits of sediment can damage the eroded and remaining soil.
- In many soils, layers with unfavourable properties are brought nearer to the surface and eventually exposed to the topsoil erodes. Such properties can include low organic matter content, high clay content, reduced availability of phosphorus, and root-limiting layers or bedrock.
- Erosion tends to make a field more variable, with filled, gullied, and other eroded areas alternating with uneroded areas and areas where eroded soil has been deposited. One typical result is that some areas get too much fertilizer while others don't get enough.
- Gullied areas are not only useless for crop production or grazing but also can make the entire field unusable or extremely difficult to farm with modern tillage equipment.

- Can the farmer afford the cost of replacing losses of organic matter and of the major nutrients nitrogen, phosphorus, and potassium?
- Does the crop need other nutrients such as zinc, which are lost with eroded soil?
- Does plentiful and frequent rainfall offset the eroded soil's loss of water-holding capacity, or does and climate make the problem even worse?
- Is the depth to bedrock such that 24 inches or more than 240 inches?
- Does the subsoil resemble the topsoil except for having a lower percentage of organic matter? Or is the subsoil more clayey or acid than the topsoil?
- Is the farmer growing continuous cotton, corn, or soybeans - or using a crop rotation that includes 1 or more acres of soil-building cover crops?
- In a field with both eroded and uneroded areas, is the farmer considering the uneroded areas as a result of trying to maintain production in the eroded areas?

In recent years, conservationists have developed computer programs or models of the erosion process and its effects. These models account for the interaction of many time- and space-dependent factors that affect erosion or crop production:

An example of such models is EPH - Erosion Productivity Impact Calculator - which was developed by the scientists of USDA's Agricultural Research Service with help from conservationists. EPH incorporates data on soils, hydrology, weather, crops, and management activities such as tillage and fertilization. The model can estimate erosion rates and the change in crop yield over time in response to erosion. Results from EPH and other models can be used to estimate the cost of erosion and to help farmers improve their management of the land.

However, we estimate the cost of erosion for productivity, we are left with the knowledge that technology has not developed a large-scale replacement for soil as a medium for growing crops.

Offsite damage from water erosion



Figure 12a. A natural stream.

Runoff from the land carries sediment, fertilizers, and pesticides into streams, lakes, and other bodies of water. This runoff causes damage caused by these pollutants is unknown, and much of the damage cannot be expressed in dollars. Evidence suggests, however, that the off-site damage caused by water erosion exceeds the on-site damage to soil productivity and farming operations. Research by the Conservation Foundation estimates that sediment and related pollutants may cause \$6 billion in damage each year. Of this, cropland related pollutants are held responsible for more than \$2 billion.

Estimates are from: *Watershed: The Off-Farm Impact*, 1985, edited by Clark B. Smith, The Riverkeeper, and William H. Clappes, The Conservation Foundation, Washington, DC, 22, p. 1.



Figure 12b. A damaged stream.



Some of the sediment carried from farm fields is deposited in the channels of irrigation ditches (Fig. 13a). As a result, the ditches must be cleaned out more frequently. Further away, sediment deposits build up in rivers and harbors, creating difficulties for navigation. Millions of tax dollars are spent every year to dredge these deposits.

When sediment enters streams and reservoirs, it reduces their capacity to hold flood flows. As a result, flooding is more likely and the damage it causes will be worse.

The cost of building and maintaining reservoirs and dams is increased because of the need to store sediment from reservoirs carrying siltation at the states best keeping the reservoirs.

Sediment can also build up in areas. National Wildlife refuges with the sediment can block or reduce growth that can block some of the spawning aquatic plants and the organisms that depend on them. When the algae die and float, they consume dissolved oxygen, reducing fish and other aquatic organisms. Algae also clog the filters that treatment plants use to remove contaminants from their effluents.

Long-term accumulation of sediment, nutrients, and pesticides have damaged vital marine resources such as the Chesapeake Bay.

Erosion and associated chemical pollutants in the runoff stimulate weed growth and algal blooms that affect use of the Nation's waters for boating, fishing, and swimming. They can also make water unfit for drinking, adding millions of dollars annually to the cost of water treatment.



Figure 13a. An example of sediment damage.



Figure 13b. An example of protection against sediment.

☛ The clear stream, not as yet clogged by the earth washed from cultivated fields, and rarely obstructed, flows to a deep and meandering channel through the "knap lands" (17). When the knap lands, higher lands, are eroded and cultivated and their soil and even the subsoil in many cases are being washed down with every rain, and then, to the water, the fertility of the bottom and much of the available value of the cultivation ☛



Figure 14. Eutrophication.

Erosion control — whose job is it?

Most erosion problems can be economically solved by using proven technology and methods that are available today.

If you are a farmer or rancher, contact the conservation district or local SCS office to find out whether you have an erosion problem and to get direct technical help and, in some instances, financial help in solving erosion and other conservation problems on your land (Fig. 15).

If there is erosion or other natural resource problem on your rural or urban community, contact the conservation district or SCS for information on what is being done about the problem and how you can help (Fig. 16). SCS offices are listed in municipal telephone directories under "United States Government, Department of Agriculture, Soil Conservation Service."



Figure 15. A district conservationist helping a farmer.



Figure 16. Environmental education at work.

Senator HARKIN. Thank you very much, Mr. Berg.
Mr. Grossi.

**STATEMENT OF RALPH E. GROSSI, PRESIDENT, AMERICAN
FARMLAND TRUST, WASHINGTON, DC**

Mr. GROSSI. Thank you, Mr. Chairman.

My name is Ralph Grossi. I am the president of the American Farmland Trust. I have submitted a complete text of my testimony, so I will try to cut through this and summarize rather briefly our primary points. To begin, though, I would like you to know that the Trust is a nonprofit organization whose specific concern is the preservation and protection of the soil that feeds America.

I am also the managing partner of a small, diversified family beef, dairy and small grains farm in Marin County, California. On my farm, we have worked with our local SCS conservation technicians on a variety of erosion control, watershed management, and pollution control problems using ACP funding. In addition, the American Farmland Trust owns farms in various areas of the country, one of which is your State, the State of Iowa. And we have set that up with the help of the Iowa Natural Heritage Foundation as a demonstration farm for low input or reduced input farming. I brought you a poster of that farm this morning. I would like to present that to you before we go on.

Senator HARKIN. Where is the farm?

Mr. GROSSI. It is just outside of Fredericksburg.

Senator HARKIN. That is pretty.

Mr. GROSSI. We just happened to have a cameraman there the day the rainbow arced over the buildings.

Senator HARKIN. Now, tell me about this farm?

Mr. GROSSI. I will tell you very quickly. This was a farm that was suffering under the financial hardship that many of your farmers were and still are, in many cases, a year or so ago. This farmer benefited, though, by the largess of a donor who provided some money to us to acquire a portion of the farm from him to help him restructure his debt, and then leased the farm—

Senator HARKIN. You bought it?

Mr. GROSSI. We bought the farm and leased it back to him, and he has an option to buy it back. In addition, as a part of that, the Federal land bank wrote off a substantial amount of the debt so that they would not have to move to foreclosure.

Senator HARKIN. How many acres?

Mr. GROSSI. It is 260 acres.

Senator HARKIN. Fredericksburg. I know where that is.

Mr. GROSSI. And he utilized treated wastewater in irrigation as part of this farm operation. So he has some 200 bushels of corn this year that is probably the envy of his neighbors.

Senator HARKIN. What did he use? Treated wastewater?

Mr. GROSSI. Treated wastewater from a municipal sewage plant. In any event, we hope to be able to have a field day there some time next year to show off some of the things he is doing as part of reduced tillage and low input sustainable practices, and we will let you know about that. We would like to have you attend that.

Senator HARKIN. I would like to see that place.

Mr. Grossi. Well, I want to thank you for this opportunity to testify this morning.

The subject of this hearing, use of alternative conservation systems to achieve conservation compliance, should highlight two problems: first, the failure of USDA in the rulemaking process to establish rational economic guidelines for use of the alternative conservation systems; and, second, the elimination of a benchmark value to determine where and by whom alternative conservation systems could be used.

However, I hope that the hearing will give some guidelines to USDA concerning future actions. While I share all of the concerns that have been raised related to the May 3 bulletin, I hope that none of the adverse effects will develop. We are encouraged by your interest in this matter and believe that congressional oversight will help to avoid potential negative results stemming from the issuance of the May 3 bulletin.

LESSONS FOR THE FUTURE

What lessons can be learned from this experience is what we ought to be looking at today.

First, a better job must be done to review any rule changes. The rulemaking process should be improved to account for both the analysis of effects on farm program objectives and the economic effect on farmers. Farmers will ultimately decide whether to comply with the soil erosion reduction provisions of the Food Security Act of 1985, and they deserve a sensible explanation of conservation options and consistent signals from USDA to avoid confusion and disenchantment with programs. We are particularly concerned about wide variations in required systems that might occur between neighboring farmers.

Second, in the same vein, a better dialog must take place between administration officials and groups that represent farmers or public interests. We have had very positive, productive discussions with many administration officials in the recent past. I think the compromise that developed in the discussions about CRP lands and drought emergency is a good example of that kind of discussion that can produce a positive result. That open dialog is, in part, responsible for the success of title XII to date. Directives such as the May 3 bulletin that circumvent that openness endanger future processes as well.

Third, continuous and thorough evaluation of conservation systems must occur. We believe that conservation compliance, including use of alternative conservation systems, will accomplish a major reduction in soil erosion. USDA tells us that the latest May 3 bulletin does not dilute its effectiveness, but they could be wrong. And SCS should be making vigorous efforts to monitor the effectiveness of the various systems.

Fourth, and in some ways the most important point, is that the technical guides being used by SCS in developing or revising conservation compliance plans must include a realistic guideline for use of one or another conservation system. Current procedures for approving a basic or alternative conservation plan do not define

what "too costly" really means—today, the definition undoubtedly varies from Iowa to Texas to Florida, and is highly subjective.

Finally, and this touches on a somewhat different issue, the recent resurgence in interest in low input and sustainable agriculture needs to become an optional component of SCS conservation plans. Low input systems or reduced input systems both reduce farm production costs and help to limit soil erosion. These systems have not been adequately explained, or for that matter, even considered, as components of conservation plans. More could be done to integrate such systems into the plans, and I would hope that Congress will urge additional effort. This effort will pay off in terms of lower costs of production, lower erosion rates, and reduced environmental risks.

These are flaws in current procedures which must be fixed. Some uniform procedure for assessing the economic consequences of requiring a basic or alternative conservation system will improve the equity of the current laws—the ways in which farmers are affected by a soil program that will reduce soil erosion.

A major challenge in this effort is designing Federal programs that permit responsible handling of the natural resource base. We believe that the administration could improve its performance in the areas just mentioned, and that improvement would improve the long-term viability of farming in the United States.

Thank you.

[The prepared statement of Mr. Grossi follows:]

American Farmland Trust 1920 N Street, NW Suite 400 Washington DC 20036 (202) 659-5170

**Statement of Ralph E. Grossi
President
American Farmland Trust**

**Subcommittee of
Committee on Agriculture, Nutrition, and Forestry
United States Senate**

Mr. Chairman, my name is Ralph Grossi. I am President of American Farmland Trust, a nonprofit organization dedicated to the preservation of the Nation's agricultural resources. I am also the managing partner of a diversified family beef, dairy and small grains farm in Marin County, California. On my farm, we have worked with our local SCS technicians on a variety of erosion control, watershed management, and pollution control programs utilizing ACP funding. My personal experience with SCS staff at the local level tells me that they are highly professional and very competent.

I want to thank you for inviting me to testify this morning. I believe that a periodic and careful review of the operation of this Nation's conservation program is an important activity. American Farmland Trust appreciates your continued strong interest in the soil conservation programs.

The subject of this hearing, use of alternative conservation systems to achieve conservation compliance, should highlight two problems: first, the failure of USDA in the rule making process to establish rational economic guidelines for use of the alternative conservation systems; and, second, the elimination of

a benchmark value to determine where and by whom alternative conservation systems could be used.

However, I hope that the hearing will give some guidelines to USDA concerning future actions. I will offer some thoughts on this subject in my conclusion.

To evaluate the severity of these problems, a brief review of the history of conservation measures and their relationship to current farm policy is useful.

Conservation and agricultural policy

In 1985 Congress enacted, as a part of the Food Security Act, a comprehensive set of programs designed to protect agricultural resources. Title XII of the Act made soil conservation and wetlands protection an essential part of agricultural policy. Some analysts argue that the 1985 Act would not have been adopted by Congress without the conservation title.

Conservation Compliance

Conservation compliance, as discussed in the 1985 farm policy debates, was a concept for extending the "sodbuster"

policy -- protecting highly erodible land from needless conversion to cropland -- to all cultivated land after some period of time. The provision passed by the Senate differed from the House-passed version primarily with respect to issues of timing, not of substance or intent.

The Congressional concern for preserving the economic viability of the farm while achieving necessary reductions in soil loss is very plainly stated in the Conference Report:

It is not the intent of the Conferees to cause undue hardship to comply with these [conservation planning and compliance] provisions. Therefore, the Secretary should apply standards of reasonable judgment of local professional soil conservationist[s] and consider economic consequences in establishing requirements for measures to be included in conservation plans prepared under this provision.¹

Neither the Food Security Act nor the Conference Report describe a specific standard for soil loss reduction with which a farmer with highly erodible land must comply.

Clearly, both conservationists and Congress recognize the need for some flexibility in implementing conservation compliance measures.

The first proposed rule for conservation compliance would have required farmers to reduce erosion to, generally, the soil

¹ U.S., Congress, Conference Report to Accompany H.R. 2100, 99th Congress, 1st Session, Report 99-447.

loss tolerance ("T") level. In cases where achieving "T" would be impractical or not economical, farmers would be allowed to adopt a different conservation plan that reduced erosion levels to 2T. Neither economic hardship nor impracticality were defined, but USDA took into account the Congressional references to necessary exceptions. Exceptions could be permitted when extreme measures -- such as construction of terraces, or wholesale changes in crop rotation -- might be required to reduce erosion to "T".

Alternative Conservation Systems

To deal with exceptional cases, USDA adopted "alternative conservation systems" and, in the field office technical guides, references to T values were deleted.

The impetus for this hearing comes from a revision of guidelines that must be used by Soil Conservation Service field personnel when working with farmers to develop conservation plans. The revision occurred when a National Bulletin was issued by the Chief of the SCS on May 3, 1988. That Bulletin requires that Alternative Conservation Systems must be included in all field office technical guides in offices that deal with areas where there is highly erodible land subject to the compliance provisions of the 1985 farm bill.

Requiring inclusion of alternative conservation systems is an action that has been criticized by many soil conservation professionals and, indeed, by many farmers. The reasons to question the wisdom of issuing the May 3 Bulletin are numerous. Among the primary reasons are its possible adverse effect on the good working relationship between SCS and local conservation districts, and its disastrous effect on the potential for reducing soil loss.

I believe we should withhold judgment on the action until we have solid information concerning its practical consequences. While I share all of the concerns that have been raised, I hope that none of the adverse effects will develop. I am encouraged by your interest in this matter, Mr. Chairman, and I believe that Congressional oversight will help to avoid potentially negative results stemming from issuance of the May 3 Bulletin.

Lessons for the future

What lessons can be learned from this experience that can help future decisions be made in a more credible, sensible way?

First, a better job must be done to review any rule changes. The rule making process should be improved to account for both the analysis of effects on program objectives and the economic effect on farmers. Farmers will ultimately decide whether to

comply with the soil erosion reduction provisions of the 1985 Food Security Act, and they deserve a sensible explanation of conservation options and consistent signals from USDA to avoid confusion and disenchantment with programs.

Second, in the same vein, a better dialogue must take place between Administration officials and groups that represent farmers or public interests. We have had very positive, productive discussions with many administrations officials in the recent past. That open dialogue is, in part, responsible for the success of Title XII to date. Directives such as the May 3 Bulletin that circumvent that openness endanger future processes as well.

Third, continuous and thorough evaluation of conservation systems must occur. We believe that conservation compliance, including use of alternative conservation systems, will accomplish a major reduction in erosion. But we could be wrong, and SCS should make vigorous efforts to monitor the effectiveness of those systems. It is my understanding that SCS Chief Wilson Scaling has agreed that some "fine tuning" of conservation compliance plans may be necessary -- use of some alternative conservation systems may result in erosion rates that are too high, and some basic system plans may be too costly. We look forward to reviewing the results of the SCS monitoring efforts and those now being planned by private groups.

My fourth, and in some ways most important point, is that the technical guides being used by SCS in developing or revising conservation compliance plans must include a realistic guideline for use of one or another conservation system. Current procedures for approving a basic or alternative conservation plan do not define what "too costly" really means -- today, the definition undoubtedly varies from Iowa to Texas to Florida.

Finally, the recent resurgence in interest in low input/sustainable agriculture needs to become an optional component of SCS conservation plans. Low input systems both reduce farm production costs and help to limit erosion.

Low input systems have not been adequately explained or considered as components of conservation compliance plans. My guess is that more could be done to integrate such systems into the plans and I hope that Congress will urge additional effort. This effort will pay off in terms of lower costs of production, lower erosion rates, and reduced environmental risk.

These are flaws in current procedures that must be fixed. Some uniform procedure for assessing the economic consequences of requiring a basic or alternative conservation system will improve the equity of our current laws -- the ways in which farmers are affected by programs that will reduce soil loss.

American Farmland Trust is dedicated to establishing a stable, economically viable system of production agriculture to anchor rural communities. A major challenge in this effort is designing federal programs that permit responsible handling of the natural resource base. I believe that the Administration could improve its performance in the areas just mentioned, and that improvement would improve the long term viability of farming in much of the United States.

Thank you, Mr. Chairman.

Senator HARKIN. Thank you very much, Mr. Grossi.
Mr. Ward, Justin Ward, National Resources Defense Council.

**STATEMENT OF JUSTIN R. WARD, SENIOR PROJECT ASSOCIATE,
NATURAL RESOURCES DEFENSE COUNCIL, WASHINGTON, DC**

Mr. WARD. Thank you, Mr. Chairman. I will be brief.

By way of introduction, NRDC is a national, nonprofit corporation with over 91,000 members and contributors nationally.

We were very active in development of the farm act, and have been a longstanding supporter of its conservation provisions. We welcome the subcommittee's interest in USDA implementation of the conservation title's key provisions.

The principal chronology of events that led to this hearing are outlined on pages 2 and 3 of our testimony, and were well summarized in your opening remarks.

I would like to say that, with all due respect to Mr. Scaling, the May 3 bulletin is in fact a change of course, and a significant change of course at that.

There was a memo issued from SCS headquarters in May 1987—not 1988, 1987. That memo instructed the States to identify, and I quote, “designated areas where alternative conservation systems would be permitted.”

The memo went on to say that ACS areas outside those officially designated would be, again quoting, “generally of limited size where special consideration is needed to address unique cropping conditions and soil conditions.”

This policy direction was reiterated again in the Federal Register this February where the Department said that the alternative systems would be available for certain soil and crop situations; not all, but certain. And further, that by their estimates at that time, non-degradation of the soil resource would be achieved under 85 percent of the new plans being developed.

I should note that with the May 3 directive, and in all the preceding developments, at no stage has there been any meaningful environmental analysis. This is unusual for Federal programs of this scale.

After all, we're talking about a program affecting, at a minimum, some 50 million acres of eroding crop land. There was an environmental assessment issued with the original interim rule issued in 1986, but that environmental assessment does not approach a thorough analysis of what blanket application of alternative systems means for land productivity and environmental quality.

We strongly oppose the blanket application of alternative conservation systems. What is wrong with that policy? The answer is that it will allow substantially more soil loss than would a system based on uniform objectives for erosion abatement.

Why does an environmental organization like NRDC care about that result? The answer is threefold.

First, there will be unnecessary lost land productivity. Yield reductions can amount to 50 percent for major crops on severely eroded lands.

In periods of drought such as this year, the dry conditions combine with erosion for a one-two punch, creating crop losses that we simply can't afford.

A second problem is that there are substantial hidden costs to farmers, costs that aren't always apparent to producers. Some of these have been outlined by Dr. Peter Nowak, an expert in conservation at the University of Wisconsin.

For example, he points out that with excessive erosion, there are lost nutrients resulting in yield reductions or annual replacement expenses, as well as seed, fertilizer, chemical, machinery and labor costs, due to replanting parts of eroded fields. Our prepared statement lists several other costs.

A third problem is that excessive erosion causes pollution away from the farm. State and local regulations, such as Iowa's erosion control law, and a number of county anti-sodbusting ordinances in eastern Colorado and elsewhere in the Plains States, I believe attest to public concern over the very real social costs that go with dust-bowl like conditions and very serious stream pollution.

The Department and SCS tend to portray the issue as a clearcut choice between a so-called rigid T-standard and the flexibility of alternative systems.

This characterization ignores a substantial middle ground and opportunity for compromise; that is, the approach we favor, which is applying alternative systems as the exception rather than the rule itself.

With respect to the T standard, this is a useful technical point of reference. It's not perfect; far from it. But it is useful as a measure, a guide, that tells you something about soil productivity.

And it also tells you about other impacts. I'm quoting from the draft Resources Conservation Act appraisal, issued earlier this year from USDA—"erosion exceeding T creates a severe hazard of gully-ing and the likelihood of damage to the crop or off-site sediment damage."

So rather than scrapping the uniform objectives of T values, as the May 3rd bulletin has done, the solution should lie in improving the rigor of the standard, perhaps along the lines of what Norm Berg was suggesting and that have been recommended by experts in the field, to refine T so that it better captures the off-site impacts.

Certainly there should be exceptions to the basic standard. We have supported that at every stage.

We are particularly concerned, looking ahead to the coming months, by the prospect of a retreat from existing conservation systems, ones that have been in place for a long time and have achieved tolerable erosion rates.

Jim Gulliford spoke about this on the earlier panel. The Department contends that this scenario won't happen, but under the current rules, it is a very real possibility.

As I've noted in our prepared statement, this result would signal that we haven't learned the lesson that was offered by noted conservationist Aldo Leopold four decades ago. In characteristic eloquence, he said then that "conservation still proceeds at a snail's pace. On the back 40 we slip two steps backward for each forward stride."

One may quarrel with just how much erosion control the farm act requires or specifies. But there can be no argument whatever that the law's purpose is to reduce, not increase, erosion where it's been controlled by good conservation farmers.

In conclusion, we believe the current policies leave the door wide open for lax and uneven implementation of conservation compliance. And we believe it is up to citizens, to Congress, and everyone else with a stake in the process, to keep close tabs on the Department's performance, and do whatever is necessary to protect the conservation aims of the 1985 farm act.

Thank you very much.

[The prepared statement and attachment of Mr. Ward follow:]



*Natural Resources
Defense Council*

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USDA Policies Undercut Conservation Aims

Statement of the Natural Resources Defense Council

**Before the Subcommittee on Nutrition and Investigations,
Committee on Agriculture, Nutrition and Forestry,
U.S. Senate**

by

**Justin R. Ward
Senior Project Associate**

**Thomas E. Kuhnle
Resource Specialist**

October 4, 1988

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Attachment: J. Ward and K. Cook, "'Sodbuster' Law is Good, So Why is USDA Fixing It?" The Des Moines Register, Jan. 14, 1988, p.13A.

The Natural Resources Defense Council (NRDC)¹ strongly supports the conservation title of the 1985 Food Security Act (the farm act). Through frequent Congressional testimony, comments on rulemakings, and related efforts, NRDC has backed the statute's purpose of linking careful land stewardship to receipt of federal agricultural benefits.

We are particularly committed to the success of the conservation compliance provision, which restricts farm program participation to producers who take soil-saving precautions on highly erodible cropland currently in cultivation. To ensure continued eligibility, affected producers must develop approved conservation plans by 1990 and implement those plans fully by 1995.²

Unfortunately, implementation of conservation compliance by USDA and its Soil Conservation Service (SCS) leaves much to be desired. This statement traces the administrative record on this issue, describes problems with the Department's position, recommends an approach more in line with the farm act's intent, and stresses the need for careful monitoring in the months ahead.

Weakened rules and policies

An interim rule issued by USDA in June 1986 required that plans developed pursuant to conservation compliance reduce erosion to soil loss tolerance (T) levels; limited allowance was made for erosion up to twice T values (2T) in circumstances where local officials deemed attainment of tolerable erosion economically impracticable.³ Thus conservation compliance implementation initially sought to keep erosion generally beneath "[t]he maximum rate ... that can occur without reducing the soil's capacity to support sustained economic production."⁴

In a major turnabout from the original rule, and in conflict with many public comments on the subject, USDA later replaced the T-2T objective with loose instructions that conservation compliance systems "will be based on the SCS field office technical guide, addressing considerations of economic and technical feasibility and other related factors" (see attached

¹ NRDC is a national, non-profit corporation with over 91,000 members and contributors. Through its Agriculture Program NRDC promotes a sustainable and environmentally protective farming system in the United States.

² We strongly oppose any relaxation of these deadlines.

³ 51 Fed. Reg. 23504 (June 27, 1986).

⁴ USDA, The Second RCA Appraisal: Review Draft 4-5 (July-August 1987).

column from The Des Moines Register).⁵ The preamble to a subsequent "correction" to this amendment noted that "alternative conservation systems" (ACSS) were being incorporated in the agency's local technical guides.⁶ As distinct from "basic" systems, ACSS fail to achieve tolerable erosion rates.⁷

Even after the weakening rule change, ACSS were introduced as exceptions to the rule. Soil Conservation Service officials in Washington instructed the states to identify "designated areas" where ACSS would be permitted; ACS areas outside those officially designated were said to "generally be of limited size where special consideration is needed to address unique cropping systems and soil conditions."⁸ Responding to this national guidance, many states elected not to prescribe alternative systems anywhere; others specified discrete geographic areas in which the more lenient systems would apply.

Early this year, the Department was still representing the ACS policy as intended for rare circumstances. The Federal Register notice containing the regulatory "correction" suggested that alternative systems would only be available for "certain soil and crop situations" and that soil nondegradation would be attained under approximately 85 percent of the new conservation plans.⁹

This changed dramatically with a May 3 national bulletin issued by SCS Chief Scaling, mandating that ACSS be allowed on

⁵ 52 Fed. Reg. 24133 (June 29, 1987).

⁶ 53 Fed. Reg. 3998 (Feb. 11, 1988). This "correction" marginally strengthened the June 29, 1987 amendment governing the farm act's highly erodible land conservation provisions.

⁷ SCS Chief Scaling has described "basic conservation systems" as:

"those...that adequately control soil erosion on cropland and...are based on the traditional SCS goal for erosion control, i.e. they reduce erosion rates to the soil loss tolerance level "T" subject only to the variation associated with the reliability of the erosion prediction equations."

Memorandum from Wilson Scaling to all state conservationists, Jan. 30, 1987 (SCS Policy for Implementing the Conservation Compliance Provisions of the Food Security Act of 1985).

⁸ SCS National Bulletin No. 180-7-12, May 11, 1987.

⁹ 53 Fed. Reg. 3998 (Feb. 11, 1988).

all highly erodible land subject to conservation compliance.¹⁰ The bulletin directed further that all reference to T values be dropped from local technical guidelines governing the alternative systems.

At no stage of this process has the Department conducted meaningful environmental analysis of the quantum shifts in rules and policies. Notwithstanding USDA officials' claims to the contrary, nothing resembling the choices made was explicated in the environmental assessment prepared alongside the original interim rule.¹¹ With respect to environmental impacts, post hoc justifications offered by the Department have been sketchy, one-dimensional and geographically incomplete.

Problems with current USDA direction

Despite the absence of detailed environmental analysis, it is apparent that current USDA direction will in many cases perpetuate the excessive erosion Congress hoped to remedy in the 1985 farm act.¹² For example, 15 percent of the highly erodible fields now qualifying for alternative systems in Iowa may suffer soil loss greater than three times tolerable levels.¹³

¹⁰ SCS National Bulletin No. 180-8-31, May 3, 1988.

¹¹ See USDA, Environmental Assessment for the ... Highly Erodible Land Conservation Provisions of the Food Security Act (June 1986).

To the extent this EA considers alternative conservation treatment levels at all, it is through a cost (as distinct from environmental) analysis that includes practices sufficient to attain T, 2T, and the T-2T range, respectively. *Id.* at 35-36. Nowhere does the document assess the consequences of policies that exclude T values altogether in conservation compliance implementation, notwithstanding the likelihood that such an alternative will cause significantly greater damage to soils, watersheds, wildlife and other environmental values.

¹² We understand that SCS has waived a guideline that formerly set an allowable maximum of 20 tons of soil removal per acre per year -- itself a generous ceiling that permits erosion greatly exceeding T values on even the deepest cropland topsoils. It appears the sky is the limit for erosion levels that may be sanctioned under some alternative systems.

¹³ Statement of James B. Gulliford, Director, Division of Soil Conservation, Iowa Department of Agriculture and Land Stewardship, before the House Agriculture Subcommittee on Conservation, Credit and Rural Development, Aug. 9, 1988.

One consequence will be lost productivity. Soybean yields on severely eroded piedmont soils in the Southeast, for instance, have been 50 percent less than comparable yields on fields experiencing only moderate erosion rates.¹⁴ Findings such as these portend substantial risks to this nation's long term food security and rural economic stability -- risks made all the more compelling by the major production declines brought on by this year's drought.¹⁵ Recent estimates from USDA project that, compared to 1987 levels, the 1988 harvests of corn, wheat and soybeans will be down 37 percent, 14 percent and 23 percent, respectively.¹⁶

Excessive erosion under weakened conservation compliance will also create a number of hidden costs within farming operations. Examples of such costs are enumerated in a recent article by Peter J. Nowak, an extension specialist in soil and water conservation with the University of Wisconsin. Among the damages on his partial inventory are:

- * Lost nutrients, resulting in yield reductions or annual replacement expenses. This includes increased lime to maintain a favorable pH in eroded soils.
- * Seed, fertilizer, chemical, machinery, and labor costs due to replanting either parts of eroded fields or parts of fields subjected to soil deposition.
- * Costs due to additional machinery wear and tear from tillage in heavier and possibly rocky subsoils after topsoils have been eroded.

¹⁴ A.W. White, Jr. et al., "Characterizing Productivity of Eroded Soils in the Southern Piedmont," in Erosion and Soil Productivity 94 (American Assn. of Agricultural Engineers) (1984).

¹⁵ This year's dry weather is taking a heavy toll on the nation's topsoil, with conditions across the country recalling the Dust Bowl of the 1930s. See P. Hiltz, "Nation's Topsoil Feels the Heat: Fertile Farm Land Blows Away in the Drought," The Washington Post p.A1 (June 25, 1988). In these difficult times, many conservation farmers, whose soils are well-equipped to retain what little moisture is available, have fared better than their counterparts who have not taken steps to control erosion.

¹⁶ B. Ingersoll and A.Q. Nomani, "Agriculture Department Holds Steady on Estimates of Damage to Crop Yields," The Wall Street Journal 20 (Sept. 13, 1988).

* Increased costs to clean out drainage and irrigation structures obstructed by eroded soils. there are also possible legal expenses if these are not adequately maintained.

* Yield losses due to wind erosion damaging young plants.

* Wind erosion either damaging or causing more frequent replacement of parts of farm machinery. It is also responsible for increased maintenance costs of farm buildings and other structures.

* Reduced property values and possibly lower land rental rates due to visibly excessive erosion.¹⁷

Consideration of these costs -- many of which are not readily apparent to agricultural producers -- is regrettably missing from USDA's calculus in conservation compliance implementation.

Moreover, excessive erosion under current rules and policies will continue to cause serious pollution away from the farm. Headlines about water quality degradation in recent months have focused considerable public attention on a problem traceable, in part, to cropland sediments, pesticides and nutrients delivered to the nation's coastal areas.

This summer's problems reinforce the findings of a landmark report from the Conservation Foundation, cited often in the 1985 farm act deliberations, which concluded that topsoil stripped by water from this nation's cropland causes \$2.2 billion in annual "off-site" costs manifested as lost recreation opportunities, damage to water storage and treatment facilities, exacerbated flooding, clogging of navigational waterways, and other impacts.¹⁸ Another recent study, conducted by researchers at Colorado State University, estimated \$28 million in annual damages to households, businesses and government services from cropland wind erosion in New Mexico.¹⁹

¹⁷ P. Nowak, "The Costs of Excessive Soil Erosion," 43 Journal of Soil and Water Conservation 309 (July-Aug. 1988).

¹⁸ E.H. Clark et al., Eroding Soils: The Off-Farm Impacts 175 (May 1985).

¹⁹ P. Huszar and S. Piper, "Estimating the Off-Site Costs of Wind Erosion in New Mexico," 41 Journal of Soil and Water Conservation 414-416 (Nov.-Dec. 1986). "For the state as a whole, 71% of the respondents indicated that blowing sand and dust increased the need for interior cleaning and laundry, 67% reported negative impacts to landscaping, 54% said recreation

(footnote continued)

A better approach

Under any circumstance, unsustainable erosion threatens long-term food security and environmental quality. Excessive erosion is particularly unjustified, however, when sustainable practices are well within reach, with no prospect of conferring economic hardship on affected producers. USDA implementation of conservation compliance is blind to this distinction, making systems that fail to achieve tolerable erosion the rule, rather than the judiciously-applied exception.

Fortunately, there is an alternative that could improve rural environmental quality, preserve ample flexibility and avoid putting farmers out of business. The solution lies in a modified version of the original USDA rule implementing conservation compliance.

Specifically, the Department should reinstate T values as the basic program objective. Erosion in the T-2T range should be permitted where rigorous economic analysis reveals a legitimate hardship associated with meeting the basic standard. In exceptional cases where technical uncertainty surrounds site-specific wind erosion estimates, a narrowly drawn exemption should allow erosion exceeding 2T, provided the approved system reduces erosion by at least 80 percent. Variances from the T objective should be allowed only where the higher increment of erosion does not cause serious water pollution away from the field. Problems in carrying out this approach should be handled through the administrative appeal process created by the statute and USDA regulations.

The advantages of this strategy are threefold. First, in one sense it would enable more, not less, local flexibility. Under the weakened policies, the Department's handling of conservation compliance subordinates local decisions to an arbitrary "lowest common denominator" imposed from Washington, D.C. In some cases, state and local officials have been frustrated by their inability to retain successful, popular and technically-sound erosion control programs.

Second, the different approach would remove conflicts with other conservation initiatives. At present, USDA implementation threatens to compromise a number of state conservation programs, including "T by 2000" initiatives in the Midwest. Further complicating matters, current USDA direction conflicts with the

activities were affected, 50% claimed their automobiles were affected, 41% reported exterior paint damages, and 35% reported health effects."

conservation reserve program (CRP). Secure in essentially continuing business as usual under ACSs, many farmers have lost one important incentive for enrolling their eroding lands in the reserve. Moreover, alternative systems that permit erosion far in excess of T may be allowed on CRP fields returning to the cropland base at contract expiration.

Third, the uniform implementation would be more fair to good stewards of the land. The relaxed procedures cannot be justified to producers with longstanding erosion control systems that protect soil productivity and abate off-site pollution.

The need for careful monitoring

Unfortunately, we see little prospect of USDA adopting this strategy for conservation compliance. In a letter to NRDC this July, Deputy Secretary Peter Myers expressed his commitment to the status quo as "a sound and practical policy."

The Department's determination to proceed with weakened implementation, and the considerable uncertainty about the fate of eroding croplands under alternative conservation systems, makes careful monitoring essential. We urge, in particular, that Congress pay close attention to data emerging from a Food Security Act monitoring effort being undertaken by the Soil and Water Conservation Society.

As the process unfolds, conservationists in government and the private sector must be especially alert to evidence of "backsliding" from conservation systems now in place on the nation's farms. An example developed by the La Crosse County, Wisconsin, Department of Land Conservation, illustrates how a producer currently keeping annual erosion in check at four tons per acre could, by substituting an alternative conservation system, continue intensive crop production with full federal assistance with erosion rates of 22 tons per acre per year.²⁰ This would recall Aldo Leopold's 1949 lament in A Sand County Almanac: "[c]onservation still proceeds at a snail's pace ... On the back forty, we slip two steps backward for each forward stride." Having conservation compliance produce more, not less, soil erosion is hardly the result Congress envisioned in framing the farm act's highly erodible land provisions.

²⁰ Letter from Paul Daigle, La Crosse County conservation planner, to Ann Robinson, Izaak Walton League Soil Conservation Coordinator, July 29, 1988.

Conclusion

Weakened administrative rules and policies threaten to defeat adequate protection of this nation's highly erodible croplands. For the sake of a clean, healthy and productive rural environment, we urge strong Congressional oversight toward improved USDA implementation of conservation compliance.

If the record shows that conservation compliance is sanctioning grossly excessive soil erosion on a widespread basis, or even in limited geographic areas where agricultural water pollution is a serious problem, then corrective actions must be taken. New legislation may prove necessary to ensure fulfillment of the soil conservation objectives embodied in the 1985 farm act.

Attachment follows:

'Sodbuster' law is good, so why is USDA fixing it?

By JUSTIN R. WARD and KENNETH A. COOK

THE 1965 farm bill's "sodbuster" provision was designed to get the federal government out of the business of subsidizing farmers who cultivate highly erodible soils without adequate protection. To date, the measure has retained very strong support in Congress. For its part, the U.S. Department of Agriculture has developed basically sound regulations to implement sodbuster — with one extremely worrisome exception.

Congress, in drafting sodbuster, prudently balanced farmers' interests with natural-resource protection. The law allows farmers to continue to receive large crop loans, deficiency payments, and other USDA benefits even if they cultivate highly erodible soils — so long as they use soil-saving cropping systems developed and approved by local conservation officials. This process makes sense. It places conservation planning and monitoring authority in the hands of the people most familiar with local soil conditions and erosion-control needs.

The USDA first ruled that these locally approved conservation plans must generally reduce erosion to the level of site-specific "T" values, which are guidelines based on experts' judgment about how much erosion particular soils can tolerate before they suffer long-term productivity damage. Most Iowa soils have a T value of 5 tons per acre per year (about one one-thirtieth of an inch of soil loss annually). In the original sodbuster regulation, USDA proposed a waiver allowing erosion at rates up to twice the T value in cases where the cost of attaining T was exorbitant.

Unfortunately, USDA abandoned this sensible course in a June 29 Federal Register notice. The department eliminated the use of T-based sodbuster standards nationwide, replacing them with entirely local determinations, which are based on vague and unspecified "considerations of economic and technical feasibility and other related factors."

Proponents say the change is necessary to avoid "unreasonable" economic burdens on crop producers. That's a worthy goal, but USDA's total neglect of T values for sodbuster enforcement goes much too far. It compromises the basic integrity of the farm bill's landmark conservation title.

By abandoning existing erosion standards, the proposed Justin R. Ward is a senior project associate with the Natural Resources Defense Council in Washington, D.C., and Kenneth A. Cook is a senior associate with the Conservation Foundation in Washington, D.C.

rule exposes local conservation officials to enormous pressure. Where money is involved, a completely local process invites widespread abuse. We anticipate unfair and uneven sodbuster enforcement from state to state, county to county, and farm to farm, as local officials struggle to decide how much conservation is economically or technically feasible in the absence of any clear standard.

USDA has fixed a rule that wasn't broken. Farmers incur no out-of-pocket expenses when they forgo sodbusting new lands. Lax standards may only result in further conversion of unplowed marginal land, undermining the natural-resource and supply-control

benefits of the farm bill's Conservation Reserve Program. Nor is a relaxed standard needed for erodible fields already in the cropland base. By the department's own estimates, much of the land in this category is already farmed within tolerable erosion levels, or can be by the 1985 "conservation compliance" deadline set by the farm bill. The very worst cropland can — and should — be enrolled in the reserve.

USDA has scrapped a feasible national goal to satisfy complaints from a few farming regions — notably cotton-growing areas in the Texas plains — where heavily subsidized producers have difficulty reducing erosion even to three or four times the tolerable rate. The rule change was good news for them. The "flexibility" theme sounded by USDA signals that local pressure

will largely determine how much conservation is appropriate.

Many people in the conservation community — inside and outside the USDA — have vigorously protested this misplaced rule change, a sentiment echoed in strong letters to Agriculture Secretary Richard Lyng from Senator William Armstrong, the original sponsor of the sodbuster bill, and from Senators Charles Grassley and Sam Nunn.

The department must carefully weigh these views before publishing the final sodbuster rule.

Farmers who plow erodible land currently in grass or trees should be held to a T-value standard to remain eligible for USDA programs. A less-stringent standard makes sense for erodible fields already in production, but reference to T values should be retained as a safeguard against too much "local flexibility."

USDA's final decision may well determine whether sodbuster results in business as usual in soil conservation or the historic reform Congress intended.



Terracing, a good soil-saving practice.

Senator HARKIN. Thank you, Mr. Ward. Ms. Cook.

**STATEMENT OF CHERYL COOK, LEGISLATIVE ASSISTANT,
NATIONAL FARMERS UNION, WASHINGTON, DC**

Ms. COOK. Thank you, Mr. Chairman. I am Cheryl Cook, and I am here today on behalf of the National Farmers Union, and, as you know, our organization had a number of strong policy disagreements with the Food Security Act of 1985.

One of the areas we did strongly support, though, was the conservation provisions of the bill, and I have been asked today to talk about some of the conservation measures of the Food Security Act of 1985, and also, what other legislation might be needed to further those goals down the road.

Two problems that we saw coming right away with the conservation compliance provisions, especially for the available staff resources to the Soil Conservation Service, and also the available financial resources to farmers who were being asked to implement these conservation practices.

We believe that a commonsense solution of the alternative conservation system [ACS] was an outgrowth of those problems. We do believe that an ACS can be a practical middle ground when the alternative is to stay out of the farm program and put in no conservation practice at all.

Since the May 3 national bulletin, though, it seems that the issue now was not whether an alternative conservation system should ever be available, but, rather, whether it should always be available to every farmer in every instance.

And I say it seemed to be that way because I read the May 3 administrative notice the same way that you did, and I read it to be a change of policy from the June 1987 regulations.

Perhaps since this morning, that is not the case; maybe it was not what it seemed. Chief Scaling seemed to think that there was no shift in policy.

Be that as it may, National Farmers Union would not support the alternative conservation system being available to every producer in every instance. It is much better off being the exception rather than the rule.

What other areas of potential legislation might be needed? First, I had thought perhaps a clarification of the role of the ACS would be necessary, if, in fact, the Soil Conservation Service was making a shift of policy.

If they are not, perhaps what is needed, then, is another memo from Chief Scaling saying, no, I did not mean to change direction from the June 1987 regulations, or, as you suggested, simply sending out the transcript of this morning's hearing might do the trick.

A second area would be additional authorization and appropriation of funding, not just for SCS but also for cost-sharing programs, and we have had policy, in long agreement with your statement, that cost-sharing can be appropriate for many of these practices.

I was encouraged by Chief Scaling's statement that we do not need to extend the 1990 deadline, that we will be able to get all these plans put together, but I am concerned, because everybody I ever knew who worked for the Soil Conservation Service was awful

busy long before the Food Security Act of 1985, and I have to wonder how many other worthwhile projects were put on the back burner for the sake of dropping everything to get these plans done by 1990.

A third area, it is not too soon to start looking at what we are going to do with conservation reserve land when those contacts are up.

Ten years is going to come upon us before we know what hit us, and it is not too soon to start the process of what do we do with that land.

And a fourth area, we need to find some motivation for producers who are not taking farm program payments now, who are producing a nonprogram crop, or who has just chosen not to participate in the program, to nonetheless use good conservation practices.

The Food Security Act of 1985 started that ball rolling with the Conservation Reserve Program, and with the use of conservation easements as a debt restructuring tool, but perhaps there are other creative ways that we can reach out to these other people and get them onboard with us.

My testimony contains a few suggestions that are just kind of out of the clear, blue sky, but I would really like to see us pursue that.

Let me just close with another prediction that a few other people have mentioned today, and that is the question of water quality.

We have been spending our time in the hearing today on soil erosion and soil loss, but water quality is right around the corner. We are within inches of having a water quality protection piece put into the FIFRA reauthorization this year, and we need to be looking at that down the road as well, and with that, I think I will conclude my remarks.

[The prepared statement and attachment A of Ms. Cook follow:]



NATIONAL FARMERS UNION

TESTIMONY OF THE NATIONAL FARMERS UNION BEFORE THE NUTRITION AND INVESTIGATIONS SUBCOMMITTEE, SENATE COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY, OCTOBER 4, 1988.

Thank you, Mr. Chairman. My name is Cheryl Cook, and I am here this morning on behalf of the National Farmers Union. The National Farmers Union is a general farm organization representing nearly 300,000 farming and ranching families across the United States. I appreciate this opportunity to express our views on the conservation provisions of the 1985 Food Security Act. Our 1988 policy statement on this issue is attached to my testimony.

Although Farmers Union opposed the 1985 Food Security Act for a variety of policy reasons, our organization did support the basic conservation provisions. Congress offered farmers the paid opportunity to remove highly erodible land from production for ten years by enrolling it in the Conservation Reserve Program (CRP). Congress gave the Secretary of Agriculture the authority to purchase conservation easements as a tool in debt restructuring. Congress threatened that farmers who put highly erodible land or wetlands into production without an approved conservation plan would lose all program benefits. And, Congress decided that farmers with highly erodible land or wetlands had to have conservation plans in place by 1990 that would be fully implemented by 1995. Erosion from wind and water is one of the greatest threats to our future food production capabilities. National Farmers Union supported a coordinated national effort to protect our soil resources.

Since the passage of the Food Security Act, two problems have continually popped up: the staff resources available to the Soil Conservation Service (SCS), and the financial resources of producers who must adopt conservation measures. Neither was unexpected in fact. National Farmers Union has had policy recommendations in both areas for several years.

The SCS has been under siege for most of the current administration. Proposed budgets have tried to severely cut funding, if not eliminate the agency completely. While Congress has resisted efforts to do away with SCS the additional workload created by the Food Security Act has stretched the agency's resources to the limit, and caused its employees to drop virtually everything but the development and approval of conservation plans and certifications to other USDA agencies that a farmer isn't sod or swampbusting. National Farmers Union strongly believes that a fully funded and staffed Soil Conservation Service, that can meet the demands of the Food Security Act and continue its other important duties is critical to any national plan of resource conservation. It is also critical to the survival of many farmers who wish to continue their participation in farm programs.

News stories were beginning to report an era of rebuilding in some sectors of the farm economy when producers were hit by the worst drought since the dustbowl days of the 1930's. Now, with a very real soil erosion threat many farmers once again face an income crisis. Even those who qualify for assistance under the recent drought relief legislation must still absorb the first thirty-five percent of their losses. National Farmers Union would support federal cost-sharing of conservation compliance practices. All citizens benefit from maintaining our food production capability.

The Alternative Conservation System (ACS) idea came about as an effort by the SCS to provide a practical middle ground. No one wins when a farmer must choose between opting out of farm programs and agreeing to a conservation plan he can't afford. In both cases, the farmer could end up out of business with no appreciable reduction in soil losses. With ACS when a basic conservation program to reduce soil losses to "T" would be prohibitively expensive, the local SCS officer would have the authority to offer a less costly alternative plan as an interim measure. The limited use of ACS can lead to greater overall soil loss reduction, and continued participation in farm programs by more producers.

However, our organization is concerned that ACS be placed in its proper perspective as an interim measure designed to minimize financial hardship. Producers who opt for an ACS system should understand that they are still subject to the law and can't go indefinitely with a lesser standard than their neighbors. Congress did not intend to excuse financially stressed owners of highly erodible land from ever having to comply with the law.

National Farmers Union is also concerned that the use of ACS remain the exception, rather than the rule. It is very important to continue the message begun by the Food Security Act -- that those who act irresponsibly toward our soil and water resources will not be allowed to benefit from farm price support programs. The Act's goal of having plans in place by 1990 to reach "T" is a tall order for SCS and farmers. But the remedy is not to abandon the goal. The remedy is to provide the tools with which to meet the goal: a fully staffed and funded Soil Conservation Service and a cost-sharing program to make SCS recommendations a reality. We should not give up on reducing our soil losses to tolerable levels.

On May 3, SCS Chief Wilson Scaling issued a national bulletin saying that once an ACS is developed, it should be made available to every producer, regardless of financial or other circumstances. We believe that this new policy is inconsistent with the intent of Congress in the Food Security Act. Congress recognized that variances in soil uses (including possible enrollment in CRP) virtually require that conservation plans be developed on a case-by-case basis. There will be individual cases in which due to financial hardship, an ACS is acceptable as an interim measure that would still substantially reduce soil erosion. This should only be offered after careful review by local SCS staff who are the most familiar with possibilities for reducing soil loss in a particular farm operation.

Most farmers I've met genuinely want to do the best job they

can in soil conservation and, as a practical matter, most farmers probably would choose a basic conservation system option if at all possible. But, making an ACS option available to everyone with highly erodible land is bound to result in some farmers who are perfectly capable of reducing soil erosion to "T" not doing so. We should not offer every farmer with highly erodible land the option of postponing basic conservation measures. This could have a significant and unnecessary effect on our soil resources. For example, ACS would allow cultivated row crops such as sunflowers, to be grown on soils with slopes up to 15 percent. The topsoil losses resulting from planting sunflowers on such a slope would be much higher than would be the case if small grains were planted, since they are in narrower rows and form a solid canopy much earlier in the growing season. The ACS alternative would allow much greater deterioration in the productive capacity of land already identified by SCS as highly erodible.

The ACS options are developed locally by SCS employees with input from farmers, conservation district directors, and Agricultural Stabilization and Conservation Service county committees. These local people who are most familiar with an individual farmer's needs and are often farmers themselves, are best suited to make the decisions of when an ACS should be offered. The law provides an appeal process to handle situations in which a producer feels that his plan has been rejected unfairly. To require that an ACS be offered in every case takes a plan designed to provide practical flexibility when needed and bends it into a confusing mess of what exactly is required under the Food Security Act.

Mr. Chairman, I understand that you're interested in potential areas of additional legislation to further the Food Security Act's goal of reducing soil losses to tolerable levels. National Farmers Union sees four such avenues to explore. First, if SCS Chief Scaling insists on offering an ACS to every producer, legislation may be needed clarifying the role an ACS should play.

Second, Congress may need to consider authorizing and appropriating funds to SCS for sufficient staff and for program cost-sharing with farmers. Conservation plans must be developed by 1990 and implemented by 1995 for highly erodible land. That in itself is an enormous challenge, yet we can't just forget about land that has an erosion rate less than "8T" (i.e., not highly erodible) but still above tolerable levels.

Third, Congress must begin now to plan for what ought to be done with land enrolled in CRP. We must be prepared to ensure that this land, which never should have been in production, doesn't go right back into crops as soon as the ten years are up. National Farmers Union encourages this subcommittee to hold hearings on this question early in the 101st Congress.

Finally, Congress should explore what other incentives might be available to convince producers who normally do not participate in farm programs to nonetheless use sound conservation practices. The CRP was a good start, as was the conservation easement for debt restructuring idea that was clarified in the Agricultural Credit Act of 1987. But, we must continue to be creative with special use valuations, or special

credits at land grant universities for farmers who have demonstrated soil management ability, providing an extra margin of safety in the FmHA guaranteed loan program to farmers who are willing to implement and maintain conservation practices, or whatever else might work.

Mr. Chairman, the Food Security Act once again recognized the role that agricultural practices play in the preservation of our soil resources. We must continue that commitment and expand our horizons to other aspects of the environment, such as water quality, that are also impacted by the methods we use to produce our food and fiber. The National Farmers Union looks forward to working with this Subcommittee to keep agriculture in the lead on these important issues.

Thank you for the opportunity to testify this morning. I would be happy to address any questions you might have.

Attachment A follows:

Attachment "A"

K. Conservation**1. Government Programs**

Soil and water conservation programs have proven highly effective for pollution abatement and soil conservation.

These programs of conservation and resource inventory must be funded at levels that will insure the continued protection of our nation's soil and water resources. Funding cuts that jeopardize the continuation of USDA-SCS cannot be tolerated.

Such financing should be on a long-term basis, providing federal commitments for at least five years ahead and providing conservation assistance on a level designed to meet the needs as shown in the federal land conservation inventory and the appraisals under the Resource Conservation Act of 1977 and other federal studies.

The needs are so widespread and urgent that any "targeted conservation" program would, if it were honest and motivated by something more than budget savings, have to call for a vast expansion of federal conservation investment.

We request that federal financing to meet clean water and air standards of the Environmental Protection Agency (EPA) be available to farmers from funds appropriated by Congress for this purpose, and that such funds be administered through the farmer-elected ASCS committees.

We urge continued improvement and acceleration of the small watershed programs under Public Law 566.

The Great Plains Conservation Program, Agricultural Conservation Program (ACP), Rural Clean Water Program, Water Bank, and other soil and water programs have proven their value in achieving land-use adjustment and the conservation of land and water. Such environmental programs should be substantially strengthened and expanded and include ACP cost-sharing for both replanted and new shelter belts, and noxious weed control.

We urge that ACP be funded at not less than the \$500-million level as originally authorized by the Soil Conservation and Domestic Allotment Act of 1937, and we strongly urge that the conservation cost-sharing delivery system for all rural federal conservation cost-sharing funds be through the farmer-elected ASCS committee system.

Farmers should be able to put strips into grass for soil conservation purposes and use these strips year after year for diverting and conserving without losing base.

We recommend that the payments due to

cooperating farmers in the Conservation Reserve Program be in cash, rather than in certificates or CCC commodities. We are concerned about the effects of the Conservation Reserve Program (CRP) upon our cooperatives, communities, and the future land ownership in our nation. As specified in the Food Security Act of 1985, enrollment in the CRP should be discontinued in any county when 25 percent of the cropland in the county is enrolled.

This same 25 percent limit should be applied to the combination of CRP and 0/92 program use in any county.

The program needs to be closely monitored to ensure that adequate weed, insect and fire control measures are instituted and that proper planning takes place when the 10-year program concludes, especially regarding procedures to enable beginning farmers and ranchers to acquire these acres.

The cost of applying the required conservation practices demanded by the conservation compliance sections (1211 and 1212) of the 1985 Farm Act should be fully funded or at least 50 percent of the cost shared.

It is unfair to ask farmers to pay for these costs.

2. Sodbuster and Swampbuster Provisions

Farmers supported the sodbuster and swampbuster provisions of the 1985 farm law after witnessing massive conversion of fragile range, pasture and swamplands into crop production by speculators who not only abused the land, but also abused farm commodity, credit and disaster programs, as well as the tax codes.

We are now deeply concerned that the regulations are not keeping faith with our support or the intent of Congress. As producers, we urged careful and judicious implementation of the regulations to permit normal, accepted farming practices within approved conservation plans, while preventing the readily identifiable abuses of soil and water resources that led to the enactment of these provisions.

We ask Congress to reaffirm that:

a. Producers should have timely and complete determinations by qualified SCS technicians as to the location of highly erodible soils and wetlands so that producers can make informed decisions on their production plans for their land.

b. Inadvertent conversions should result in penalties that are proportionate to the error, and should not be treated the same as intentional conversions in which all program benefits are lost.

c. Due process rights are observed both in filling out federal forms and in responding to allegations of violations.

d. The Conservation Reserve, Waterbank, and similar programs are fully funded and made available to economically assist farmers in complying with the provisions.

e. Shallow depressions that may be temporarily wet, but are normally cropped, be exempted from the swampbuster regulations.

3. Predator and Rodent Control

Since the 1931 Animal Damage Control Act (ADC) mandates that the federal government shall protect the livestock industry from predatory loss, we recommend that the original intent of the law be enforced.

Judicious use of Toxicant 1080 and M-44 cyanide guns, use of aerial shooting in winter, trapping, and other control practices must be continued on federal, state, and private lands to control coyotes and other predators.

If an adequate ADC program is not available to farmers, we recommend that a federally financed indemnity program be instituted to pay for livestock losses.

Senator HARKIN. I will just pick up on that note. You are right, water quality is around the corner. We have more and more data that aquifers, that we did not think would be invaded for hundreds of years, have been invaded in a very few short years.

The whole area of ground water pollution, what is happening in ground water is a serious problem. For example, sink wells in northern Iowa where chemical runoffs are going in there, and getting right into the ground water supply.

It is a problem that is coming, and we are going to have to do something about it. Well, that is another topic for another hearing.

Mr. Berg, let me ask you just a kind of a—it is not a philosophical question but it is a question of judgment, perhaps. What Mr. Scaling is saying, if I understand him—and I do not mean to put words in his mouth—but what I understand him to say is that—if SCS goes too far, too fast, farmers will not get involved in conservation. They will opt out of this conservation program. So SCS has to take it a little bit at a time. That it's better we get a little bit of soil conservation than none at all, if you try to get too much done too soon. And that that may be what we were doing in the 1985 farm bill, going too fast, too far. That farmers would rebel against conservation compliance and the whole program would come down because they just simply would not comply. That it's better we reduce erosion a little bit, and take that first step. What do you think of that? Is that a valid concern? Were we going too far, too fast, with the 1985 farm bill, and with the initial regulations that came out in 1986 and 1987?

Mr. BERG. Mr. Chairman, first of all, I go back to the reference to the sodbusting legislation that showed up real early in the process, and in terms of how to determine what land should be left in good grass, or tree use, contrasted, to bring it into cropland that we did not need at that time, that would be highly erodible if it was brought into that use.

The standards that we had in mind there were to keep most of that land, including the wetlands, from being added to our cropland base that at that time would extend the problem of surpluses and that sort of thing.

So, as I see it, we have been working for a long time toward trying to keep highly erodible land from coming into the system.

We recognize that the land that had been brought into the system over the many years, and was qualifying for the farm program benefits had to be dealt with, so we offered the CRP.

Now we go back to the definitions that is being used by SCS in terms of what is highly erodible land. Their rule that was published September 17, 1987, points out the SCS responsibilities regarding highly erodible land, and in implementing these provisions, develop and maintain criteria, prepare and make available to the public lists of highly erodible soil map units, make soil surveys where they need them, and provide technical guidance.

Then they identify the highly erodible land criteria, and it does specify here, that it gets into the T values, and I mean, this is out in the field and has been for some time.

We have yet to reach the first appeal on this. There is a procedure set up in this rule for an appeal process. I am quite certain, as we get closer and closer to the day when this kicks in, we may get

back to a better answer to the question that came up earlier between Senator Conrad and the Chief, as to whether this had some legal implications that had not fully surfaced yet.

I think that will eventually come. I do think, on the lands that we are talking about—and you mentioned that in your opening statement—it is a fairly limited area, perhaps less than one-tenth of the land that is used for cropland.

These lands are in need of some sort of conservation treatment that goes beyond what has been adopted so far.

Now, whether we have the research to bring all of this land back to an acceptable level of soil loss is still ahead, but why don't we give it a try?

This is the first time we have had that opportunity, in the conservation movement, to try to use the stick, along with the carrot, to convince people that something needs to be done, if they continue to receive the farm program benefits offered at quite a sizable input from the standpoint of the taxpayer.

And the off-site concerns here are increasingly going to be whether or not the conservation community that has been operating for 50 years can do the job.

With a combination of the carrot, and now, some mandating as to what land should stay in grass or trees, or land that is already in the system, how it should be managed.

Now I come back to the basic concern I have. What does that professional conservationist at the field level utilize in the way of some guidance, as to what should be done?

In my district, God bless his soul, our district conservationist—and our board approved the plans—is trying to achieve T.

Senator HARKIN. Well, it seems to me that I hear Mr. Scaling, and perhaps a couple of the other witnesses, saying that the standard is whether the plan will reduce erosion. That is the standard. But I say the question is by how much will the plan reduce erosion? That is the standard.

Mr. BERG. Mr. Chairman, in my district, bordering the Chesapeake Bay, if we do not do a credible job on this one, if the land viewers in that area, highly urbanized, view gullies still coming from the fields, and serious soil loss still coming from the fields, that have been qualified to accept these farm program benefits, we are going to have a very difficult time to live with our county and our State laws in our State.

Senator HARKIN. Do you think the SCS can meet the conservation compliance plan deadline for all landowners with highly erodible land? Could they meet that?

Mr. BERG. Well, the SCS is saying that they are ahead of schedule. They do have the highly erodible land identified, as I understand it, as of the 1st of October, and that is a first step. They are making a magnificent effort to get the conservation plans to the people that have need for them.

Not all of them may be willing to accept the fact that they need them. The identification of highly erodible land may be something that we still need to work on for some land users, but one point I would like to make.

I understand SCS is about 2,000 personnel below their ceiling. Now what is it going to take to get them up to capability, to meet the additional demands of the Food Security Act of 1985?

Congress has done a good job of supplementing their funds, adding I think for this fiscal year another \$61 million. That is a plus.

Other people can help. State and local conservation districts have people to help. Private activities can be involved here. I think we need to make an all-out effort to do the job.

Now, I hope there is something other than just paper plans.

Senator HARKIN. I do, too. For the record, what precisely do you mean by that, that you hope there is something other than just paper plans?

Mr. BERG. Well, at this stage they are getting agreement from that land user as to what they intend to do between now and the time that compliance kicks in, or start the process and make it work.

But the practices that are being offered build around a very heavy element of reduced tillage, and the people that have not gotten into that mode yet, on that type of land, have a ways to go.

That is a system that requires skill.

Senator HARKIN. Now here is another problem. A farmer reduces tillage, then the farmer puts on more herbicides to kill the grass and weeds, and you are back to water quality problems.

Mr. BERG. Yes. And I know that the dilemma is here in terms of how best to do that. We get back to the low input characteristic—

Senator HARKIN. Maybe that is where Mr. Grossi comes in. That is a good point to ask you about, this matter of low-input agriculture. You raised the point about including low input, or sustainable, agriculture techniques as a part of a conservation plan. I had not really thought much about that before.

I think low-input agriculture, as it has come to be known, has generally been thought of as a way of—well perhaps reducing some pollution—but I think more as a way of cutting costs. Low input. That is what it means.

Mr. GROSSI. I hope that that is what it has come to mean.

Senator HARKIN. But maybe it has a different component, a conservation component. If a low-input agriculture technique were to be included as part of a conservation plan, would this be a new responsibility for the SCS?

Mr. GROSSI. In some cases it would be. It would be an expansion of responsibility.

Senator HARKIN. You have not dealt with that before, have you?

Mr. GROSSI. Yes, but you have to understand that that is the person who is out there in the field with the farmer, talking about how he is going to implement a specific plan. They are discussing that with him and there is—as you know, and you made reference to it—the problems with one plan, or one Government program—whatever it might be—being implemented, having then some other negative effect that was not counted on, conservation tillage having the negative effect of increasing herbicide usage is the best example of that.

Herbicides are only one of the inputs, but they are one of the most obvious inputs, costly inputs on a farm. That has to be considered, and there is a crying demand out there in the field, among farmers, to help them cut their costs.

You know what it costs to produce a bushel of corn in Illinois or Iowa, and it is well over \$2 a bushel. Drought has run the price up right now, but a year ago, the market price was well under the cost of production.

Farmers recognize that sooner or later they have to get their costs down, and hope that prices come up as well. Focusing on helping them cut their costs is a major item, and a lot of that is what happens at the cultivation level, at the field practice level, and the soil conservation technician is the one who is in place, and working with that farmer, and logically ought to have some of this additional information to pass through to the farmer.

But certainly it would be an expansion of their scope.

Senator HARKIN. How do you feel about that, Mr. Berg? You have been around SCS a long time now. Could they handle a new responsibility like that? Could they take on this new responsibility of using low-input practices as a factor in conservation plans. You understand what we're talking about?

Mr. BERG. Yes.

Senator HARKIN. Using that as one factor in a conservation plan.

Mr. BERG. Yes. I think that as Mr. Grossi points out, there is need for additional research—there is no question about that—and that is beginning to build because of the initiatives which are coming from the Congress.

We got into the nonpoint source pollution problem here a couple of decades ago, and many of the land users that were faced with nutrient management, animal waste management, did not know where to turn.

They came into the district offices and found the SCS or some local person that had some professionalism, to come out and begin to advise as to what should be done.

I would see a nightmare out here, in terms of the land user, who have been associated with the conservation districts in terms of what ought to be done on their total resource base in terms of the future needs for the conservation systems.

We have moved, over the years, to identifying plans that were needed for ACP cost-sharing, the Great Plains Conservation Program, the Water Bank. Now we have got the plans coming out for conservation compliance.

There are plans required for CRP. We are going to get into the whole business of water quality plans in some of these areas that are giving that a high priority.

Now we are adding the possibility of having a low-input compliance plan that goes much beyond the conservation approach. It looks at the whole farm system in terms of keeping that as a stable, viable, agricultural enterprise.

How do we get that together? I think that is going to be the debate in 1989 and 1990, that will offer these people that are the recipients of all of this advice and counsel—what is it that they should be doing in the interests of their basic resource, obviously, and then to meet some of society's needs that are being added,

almost incrementally here, and we have not yet been able to get the act together, totally.

I think the SCS can do it, but they are going to have to have more help, and more research, and more experience on this.

I would like to see Extension more involved. ASCS has a role to play, and the conservation districts need to be brought along.

Senator HARKIN. Right now, in the covered crops—feed grains, food grains, cotton, rice, oilseeds—to get program benefits you have to do certain things, such as setting aside land, plus some of these conservation requirements.

The program payments are tied to compliance with certain requirements such as set-asides. The payments are based upon production. Corn, wheat, cotton, everything else, is based upon production. You have set aside everything and then you get paid for what you produce, some kind of payment, target-price payment.

Are you saying that in the next farm bill perhaps we ought to have a requirement of some conservation, and then maybe use the carrot approach by making the payments based upon certain conservation practices. Maybe even low-input agriculture.

In other words, there could be a point system or something, that if farmers were to implement certain conservation practices they might get maybe a higher payment for the crops that they produce.

Perhaps if a farmer had low-input agriculture practices to reduce the need for chemicals and to control water quality problems, that farmer might get a little bit more of a benefit from the farm program support mechanism.

Well, I would like to see some of your thoughts on that. I would like to see some proposals along that line—how that might work.

Mr. GROSSI. I think you might get something in the next 6 months or so.

Senator HARKIN. Well, we had better hurry. The train is getting loaded up with fuel and is about ready to leave the station here. The farm bill is a year off, but I am telling you, things are starting to get set in place.

And I have been talking about this for some time, not openly but quietly, and I would like to start seeing some proposals.

Mr. BERG. It is important we get back to the definition of that what land will do, what that soil will do. That we have a good definition we can rely on; that there be some recognition that nature intended—I go back to the basics that I learned in the beginning, nearly 50 years ago, that land is capable of doing certain things, and we are refining that every day.

Senator HARKIN. You can farm land for thousands of years and not lose its productivity. You can also farm it for 10 years and lose the whole thing.

Mr. BERG. Right. I stood on a farm in Norway a few years ago that had been farmed for a 1,000 years, because they value the land. It is so limited.

Senator HARKIN. Sure. There are places in Iowa and Illinois, for example and I am not referring to mountains but to little hills—where you can just see that the topsoil has come off. You can just see it on the hills.

Mr. GROSSI. The results of the drought this year showed, dramatically, where the soil loss really affected and impacted yields.

Senator HARKIN. Yes. Well, is there anything else that any of you would like to cover with me before we adjourn this hearing?

[No response.]

Senator HARKIN. I do not know if we have cleared anything up or not. I have received some good testimony and some good input.

I still do not know whether the May bulletin changed the June 1987 rule, or not.

Mr. Scaling said it did not, that the June 1987 rule is still in effect. Well, I am going to press that point home.

Then I heard two witnesses on the last panel, at least two of the witnesses, say that even if it did change it, SCS should not go back again, even though they supported the June 1987 rule.

Now Mr. Durban, from the NACD, said that basically they do not want to go back because it would cause confusion.

And I talked with Mr. Cline of the National Cotton Council, and he referred to economic hardship, but technical and economic feasibility was already in the June 1987 rule.

So where are we now? If Mr. Scaling is correct in what he says—and he is the Chief of SCS—the May bulletin did not change the June 1987 rule, that the 1987 rule is subsumed in the May bulletin, and it is still in effect, then let me ask you this: Should we go back to the June 1987 rule or should we stick with the May 1988 bulletin? Will it cause more confusion to go back to the June 1987 rule? And how can you go back to something that he said was not changed?

Mr. BERG. I have the greatest respect for Mr. Durban, and my district pays its dues to their national association. He represents our interest nationally. I think there will be change. There is a great deal of confusion now. The conservation districts are in a dilemma here because some of them are not approving these plans, and that is not a good way to go for the future.

That destroys 50 years of confidence here. The majority of the districts, I think, would like to get on with the job, and he is absolutely correct—the more confusion that we add out here, makes it more difficult.

Senator HARKIN. So what should we do?

Mr. BERG. There needs to be, as I see it, some better answers to the questions that I have put in the record. We are beginning to look at those.

I think the effort here, to allow States that would have liked to have done something about T, as Iowa, Wisconsin, Ohio and several States were underway with, would not blow the system, as I see it.

It seems to me that there would be a way that it could be done, and the latitude and flexibility that we endorsed provided, as I thought, for these State conservationists, and their advisers, to make some decisions, that we ought to give them a soil loss standard.

Senator HARKIN. I do not want to add to the confusion. I want to get something cleared up. Either we have changed from the June 1987 rule, we have made this change, or we have not. Mr. Scaling said we have not. Others here say we have.

As I said, I do not want to add to the confusion. I want to get it cleared up. It is my intention, yet today, to issue a press release. I am going to state in it that Mr. Scaling today reaffirmed the 1987

rule, said that it has not been changed, and that his May 3 national bulletin did not change the 1987 rule, that it was included in the May bulletin.

And that State directors ought to be notified of that, and that they can refer, in their plans, to the 1987 rule.

Now I will let the press go ahead and ask Mr. Scaling again if that is correct or not, and we will see what he says at that point.

Mr. BERG. I wish there were some way we could take a poll of those professionals, and their conservation district governing boards, and the other people in that particular county throughout the country, as to how they would like to have it done. I think you would find strong support for what you are saying.

Senator HARKIN. Well, I do not know that, Mr. Durban said no. He says leave it the way it is.

Well, I am still going to put that press release out because I heard Mr. Scaling say it, and I am going to say that State directors are on notice that they can adhere to the 1987 rule.

And I want to know for my State, and other States, if they are not going to follow the 1987 rule, why they are not.

Now, if they are not, that is their decision, but I do not want them to tell me that it is because Washington says they cannot adhere to the 1987 rule.

Well, thank you all. This has been a very interesting hearing, and one that I intend to follow up on, not only just on the subcommittee but in other ways.

Thank you all for coming. I appreciate it.

The subcommittee will stand adjourned.

[Whereupon, at 1:05 p.m., the subcommittee adjourned, subject to the call of the Chair.]

[Material submitted for inclusion in the record follows:]

HEARING STATEMENT

SUBCOMMITTEE ON NUTRITION AND INVESTIGATIONS

Hearing on the Soil Conservation Service Implementation
of the Food Security Act of 1985

The Conservation Title of the Food Security Act of 1985 is one of the more complex pieces of conservation legislation ever passed by Congress. The conservation compliance provision is a primary feature of this title. This provision links the USDA commodity programs to the wise use and conservation of our Nation's cropland.

The U.S. Department of Agriculture (USDA) has estimated that this provision affects over 118 million acres of cropland. This acreage represents over one fourth of all cropland in the U.S.. This provision was supported by both environmental and farm organizations.

We believe that much of this support for the conservation title on behalf of farmers and ranchers stems from the USDA's implementation of the provision stressing a common sense approach. This approach takes into account the economic consequences and related concerns that farmers must face as they develop and implement the conservation plans that are required for participation in farm programs.

As the rules and regulations were developed and published in the Federal Register, the USDA received hundreds of public comments indicating that a rigid numerical standard for erosion reduction would seriously harm agricultural producers in many parts of the country. Many farmers realized that they would have had to take large amounts of land out of production or incur excessively high capital costs in order to remain eligible for program benefits. This outcome was not the outcome foreseen by the authors of the conservation title. Moreover, such an outcome would destroy the political support for the worthy goal of soil conservation.

It is obvious that Congress did not intend for the conservation compliance provision to force farmers out of business or require them to incur excessive capital costs that would jeopardize their economic well being.



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October 4, 1988

Honorable Tom Harkin, Chairman
Subcommittee on Nutrition and Investigations
United States Senate
Washington, D.C. 20510

Dear Senator Harkin:

The Wildlife Management Institute appreciates the opportunity to comment on implementation of the conservation compliance provision of the 1985 Food Security Act.

The Institute, a private nonprofit organization staffed by trained wildlife professionals, has been dedicated to the restoration and improved management of natural resources since 1911. Representatives of the Institute have worked diligently to assist in the development and successful implementation of these provisions to integrate a conservation dimension into federal farm commodity programs.

Conservation compliance provisions of the 1985 Farm Act sought to adequately protect about 120 million acres of highly erodible croplands from soil erosion. However, recent policy guidelines issued by the Soil Conservation Service (SCS) have the potential of reducing significantly the success of this important provision.

On February 11, 1988, SCS dropped all reference to soil tolerance ("T") levels for controlling and preventing soil erosion on highly erodible croplands. In its place, erosion reduction was to be evaluated according to local cropping system criteria set forth in SCS field office technical guides (FOTG). "Alternative conservation systems" were to be offered for some limited highly erodible croplands that were in production prior to December 23, 1985 if "economic and technical feasibility" precluded strict application of FOTG guidelines. The Institute opposed these liberalizing rule changes fearing that SCS would not control excessive applications of liberal "alternative conservation systems." Those fears appear to have been well founded.

DEDICATED TO WILDLIFE SINCE 1911

**Senators Signing Conservation
Hearing Statement**

Senator Heflin

Senator Melcher

Senator Cochran

Senator Pryor

Senator Breaux

Senator Boschwitz

Senator Bond

Senator Harkin

Senator Dole

Senator Lugar

Senator Boren

Senator Helms

Senator Karnes

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Wildlife Management Institute

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In a national bulletin dated May 3, 1988, Chief Scaling announced that "alternative conservation systems" would be available to all agricultural producers on highly erodible croplands by June 15. These "alternative conservation systems" will allow much higher erosion rates than anyone, including many soil and water conservationists, ever had anticipated.

Evidence indicates that USDA officials may now be routinely developing conservation plans that allow erosion rates several times the soil's "T" value. In Wisconsin and Ohio, for example, it is not uncommon to find "alternative conservation systems" with allowable soil losses of 20 tons/acre/year or more. These are from four to seven times higher than acceptable "T" or tolerance levels. SCS's own estimates of soil erosion in 12 midwestern states estimate that average erosion rates on highly erodible lands using "alternative conservation systems" will be more than double that of basic conservation systems which are based on "T". Such liberalization of national soil erosion standards threatens to undercut established state erosion control and prevention programs, such as Iowa's.

By reducing criteria for controlling soil erosion, SCS has introduced a situation that may require a tremendous duplication of workload. About 25 percent of all conservation plans, covering 34.6 million acres of highly erodible land, have already been completed. Nearly all of these plans have been written to "T" or "2T". Farmers who agreed to earlier conservation requirements now can have those plans modified to allow the use of liberal "alternative conservation systems."

Routine use of "alternative conservation systems" also ignores the fact that not every basic conservation measure is cost prohibitive nor even more expensive. Making "alternative conservation systems" available to anyone will result ultimately in many farmers choosing the more liberal practices even though economically and technically they are perfectly capable of reducing soil erosion to "T".

The Institute also is concerned over the fate of CRP lands under new "alternative conservation system" guidelines. Under the February rules for conservation compliance, highly erodible lands converted from "native vegetation" will not be eligible for "alternative conservation systems." Although apparently designed to give rangelands threatened with sodbusting a higher degree of protection from erosion, it is uncertain how CRP lands are affected. If "alternative conservation systems" are allowed for CRP lands, agricultural producers will have greater incentives for bringing them back into production after their contracts expire. High market prices for soybeans and other commodities may even entice some farmers to buy back their CRP contracts and withdraw from the CRP program. Allowing the use of inadequate "alternative conservation systems" for bringing CRP lands back into production after taxpayers have spent billions of dollars to protect these fragile lands would be a national disgrace. The Institute recommends strongly that CRP lands receive the highest degree of protection possible under the sodbuster provision of the 1985 Farm Act.

The Institute believes that the inadequate and inappropriate "alternative conservation system" policy guidelines issued by SCS have created confusion, inconsistencies, and the clear message that conservation compliance is being influenced by political pressure. Realignment are needed to return to more acceptable erosion control standards that offer greater consistency and provide greater benefits from investments of taxpayer funds in USDA programs, as agreed to when the 1985 Farm Act was developed and initiated.

The Institute recommends that SCS return to defensible "T" soil loss standards and develop an acceptable appeals process for producers who can demonstrate that required conservation practices are not technically or economically feasible on their erodible lands. In such cases, alternative conservation systems that will reduce soil erosion by at least 50 percent and have a maximum erosion rate of 2T could be allowed. The Institute believes that the use of "T" standards, with an appeals process, as used in the first farm plans completed, offers producers adequate flexibility, allows increased reduction in overall soil erosion and ensures greater consistency in program implementation. Certainly, carefully crafted soil erosion standards must be used to respond effectively to new mandates for preventing and correcting nonpoint source pollution situations.

We appreciate the opportunity to present these views and recommendations for the official record of the October 4 hearing. It is paramount that the recommendations be implemented immediately to ensure that a strong conservation dimension prevails in agricultural commodity programs.

Sincerely,



Laurence R. Jahn
President

cc: Peter C. Myers
Wilson Scaling

IRJ:dt

STATEMENT OF THE AMERICAN FARM BUREAU FEDERATION
TO THE NUTRITION AND INVESTIGATIONS SUBCOMMITTEE
OF THE SENATE AGRICULTURE COMMITTEE
WITH REGARD TO SOIL CONSERVATION

OCTOBER 4, 1988

The American Farm Bureau Federation is the nation's largest general farm organization with a current voluntary membership of 3.6 million families who join nearly 2,800 county Farm Bureaus in 49 States and Puerto Rico.

We appreciate the opportunity to comment on the conservation compliance provisions of the 1985 Farm Bill. With the passage of the Farm Bill, Congress enacted the strongest soil conservation programs to date to protect the productivity of the nation's agricultural soils and to prevent water quality damage through sedimentation.

Conservation compliance requires that as of January 1, 1990, all highly erodible croplands regardless of cropping history or when the lands were broken out must have a conservation plan approved by the local conservation district for production of agricultural commodities. Failure to have an approved conservation plan will result in the farmer's losing eligibility for all USDA farm program benefits.

Under the original rules published by USDA, conservation plans had to provide for reduction of soil loss to levels not in excess of the soil loss tolerance level or the soils involved. This level is commonly referred to as the "T" value. The original rule also permitted, under certain circumstances, reductions to a level not in excess of two times the soil loss tolerance level or "2T".

After encouragement from Farm Bureau and almost every other farm and commodity group, USDA amended the original rule out of concern that it was too rigid and precluded many practical solutions which might not achieve the "T" standard but would still go a long way toward saving our soil. The interim rule suggested USDA have the latitude to adopt and apply locally developed standards. To achieve this the local Field Office Technical Guide was to be used to take into account soil erodibility, conservation system effectiveness, economics and other factors related to local areas. The change had the effect of eliminating a rigid "T" standard for soil and crop situations where it is not economically or technically feasible or practical to achieve "T".

Farm Bureau strongly supported the change in the interim rule to the use of a tentative conservation systems. We believe they provide for substantial erosion reduction while permitting the needed flexibility and professional judgment.

When the 1985 Farm Bill was adopted, Congress realized that forcing immediate compliance would impose an undue hardship on many farmers who had already established a cropping history. Congress therefore allowed for a grace period until 1990 for farmers not farming with a conservation plan. Congress also recognized that it was not feasible for conservation districts or the Soil Conservation Service to meet the demand for services if conservation compliance was required immediately. At this time, USDA estimates only about 40 percent of the 800,000 farmers who will need conservation plans have filed and had their conservation plans approved. Given this level of response, Farm Bureau is skeptical the 1990 deadline can be met. In fact, we believe a delay of implementation may be inevitable.

We understand some groups are working to force USDA to change their rules again--away from the use of alternative systems and back to a "T"/"2T" standard. We strongly oppose that initiative for the following reasons:

(1) We are skeptical that all the required conservation plans can be completed by 1990 under compliance provisions using alternative conservation systems. However, we are certain that the deadline could not be met should the rules be changed to again require the level of "T" and "2T". In addition to the increased work that would be required for the plans not yet completed, those already completed would have to be reviewed, and many changed, to meet the "T" requirement. This would be a tremendous demand on personnel. It would cause hardship to farmers who have already begun implementing their plans, and tremendous resentment.

(2) Far overshadowing our concern of the deadline issue is the additional cost burden on farmers to comply under a "T"/"2T" system. Many plans would require installation of costly structural changes, whereas management and rotation strategies are currently adequate to meet conservation systems. The expense of reaching those levels is prohibitive for many producers in traditional program crop regions. Compliance with "T" or "2T" would cause extreme economic hardship and would drive many producers out of business. We believe use of alternative conservation systems can provide significant erosion reduction without imposing unreasonable economic costs on producers.

For instance, one farmer had a conservation system in place including diversions, contouring, farming, grassed waterways, a silt trap, and a farm pond. SCS estimated the erosion potential of his soil at 75 tons per acre per year if it had been conventionally plowed up and down the hill. At that rate, his topsoil would have disappeared in three or four years. However, with his existing conservation system and cropping rotation, he had never had to clean out his sediment trap in 25 years. SCS employees even agreed that his system was working and effectively. However, the diversions do not meet current technical specifications of the Soil Conservation Service.

This farmer was one of the first in his area to begin work with SCS on a conservation plan after he heard about the new conservation compliance program. Even after a year's time, two and three days of his own time and 5 to 20 workdays of SCS's staff time, a satisfactory plan had still not been developed. At that point, SCS was telling him that he would have to tear out his hold system (which SCS admitted was working just fine) and install new terraces. The farmer estimated costs of doing this at \$15 000 to \$20 000 or four fields totaling 30 to 35 acres. That's an exorbitant price to pay to replace a system that was already in place and doing a satisfactory job of controlling erosion.

(3) Another concern Farm Bureau members have expressed is that of forcing people out of farm programs. One of the biggest drawbacks to forcing compliance under the more strict "T" values rather than alternative conservation systems is that strict cross compliance requires so much more expense that some farmers are likely to drop out of farm program participation rather than pay the high price of compliance. This would ultimately diminish the conservation benefits of cross-compliance because highly erodible land would be driven out of the programs. Generally this is the same land that has eluded voluntary conservation programs.

(4) One final concern as it relates to farm programs is that of the interrelatedness. Our policy on farm programs recognizes that all commodities are interrelated and that program crop policies should not be developed at the expense of nonprogram crops and other commodity ties. We are concerned that a return to strict "T" compliance might force a widespread shift to nonprogram crops in some areas. This could result if substantial cropland cannot be brought under the conservation requirements and might disrupt the market for many nonprogram crops.

(5) There is nothing a farmer hates worse than having the rules changed in the middle of the game. Farmers are working and planning under the premise that compliance will be a low economic and technical feasibility. To change that premise now--less than 18 months before plans must be in place--is not fair to the farmer. USDA held a comment period on the interim regulations and 199 comments were received. One hundred-sixty (160) favored the use of alternative conservation systems while only 39 opposed the interim rule change. Now is not the time to decide USDA and a majority of those commenting were wrong.

(6) A large group of farmers who are now renters will be affected. Landowners may be willing to enter into conservation plans if most or all of the work can be accomplished through rotations and management. However, those same landowners will be reluctant to enter into conservation plans that require costly structural practices. As a result, less land may be available to rent to farmers for crop production.

We appreciate the opportunity to submit this statement.


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